

EMPLOYING A PARALLEL CORPUS-BASED APPROACH IN TEACHING SEMANTIC
PROSODY AND COLLOCATIONAL BEHAVIOR TO ARABIC EFL LEARNERS

By

ALHASSAN ALZHRANI

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Supervising Committee:

Laurel Stvan, Supervising Professor

Suwon Yoon

Samuel Smith

ABSTRACT

This dissertation is intended to investigate if, and to what extent, a web-interface parallel corpus known as Reverso Context can assist Arabic EFL learners in addressing two aspects of word knowledge: semantic prosody and collocational behavior. A convergent mixed method design is adopted in this study in which one group of undergraduate L1 Arabic students are asked to do a pretest that is followed by a pedagogical intervention over the course of three 3-hour sessions and then a posttest is administered again with the same group of students. The posttest is followed by a one-on-one interview with the students and the course instructor to obtain a well-rounded view of their experiences with the pedagogical material and the new resource that they have been introduced to. The results reveal that the students are capable of using the parallel corpus (Reverso Context) effectively in semantic prosody identification and non-congruent collocation translation. The interview demonstrates that in spite of some difficulties the students encounter with Reverso Context, the students' perceive the new resource positively and that it might be used to increase autonomy and discovery learning. The study also illustrates how Reverso Context can be implemented effectively to obtain the maximum benefit of this resource in a classroom setting with some pedagogical implications for EFL teachers. In addition, the study concludes with some tips for future researchers on how to better evaluate the efficacy of parallel corpora in foreign language pedagogy.

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CHAPTER 1: INTRODUCTION

1.1 Background

The last two decades have witnessed a noticeable advancement in the implementation of a data-driven learning approach (DDL) in a classroom setting. A considerable amount of studies compared the traditional approach to the DDL approach in language learning and translation teaching advocating the great value of the DDL approach in providing ESL\EFL learners with further insights into their L2, specifically in terms of how near synonyms may vary greatly across languages. Most existing research used either a monolingual or a comparable corpus; very few studies considered using a parallel corpus in L2 teaching due to the scarcity of such corpora or the difficulty of compiling a representative parallel corpus (Liu, 2014).

The DDL approach introduced by Tim Johns (1991) is a corpus-based learning approach that uses an inductive approach allowing students to learn more about their L2 using authentic texts presented in a concordancing format. The texts are presented in a line-by-line format with the target word, or what other researchers prefer to call it the “node word”, being in the center of the screen. The goal of the DDL approach is to promote autonomy and discovery learning (Boulton, 2009). In other words, students can consult corpus data and develop their own strategies in identifying linguistic patterns on their own. In this case, the teacher becomes a coordinator and a facilitator of the learning process, and the student takes the role of a researcher. Previous studies on L2 learning that used the DDL approach found that it does not just assist students in learning some features of their L2 autonomously, but also creates an engaging environment in the classroom (Benson, 2001; Boulton, 2009; Guan, 2013).

Parallel corpora have been mainly utilized for comparative linguistics and translation purposes (Aston 1999). They seem to be ideal for investigating cross-linguistic patterns and translation purposes as they include the speakers' L1 and L2 aligned sentence by sentence. As indicated by Aijmer (2008), parallel corpora can help learners to “reveal the degree of mutual correspondence of lexical items in different languages, and uncover crosslinguistic sets of translation equivalents in the languages compared” (p. 99). However, there is a lack of practical research exploring the potential of parallel corpora for pedagogical purposes, specifically the effectiveness of parallel corpora in teaching semantic prosody and collocational behavior in a classroom setting. Therefore, several researchers called for more studies investigating the pedagogic value of a parallel corpus (Liu, 2014; Wang 2001; Fan & Xu 2002). This study is a response to this call by using a general web-interface parallel corpus called Reverso Context that includes millions of texts in many different languages aligned sentence by sentence with their translations. More specifically, the current study was intended to investigate the potentiality and applicability of Reverso Context as an additional resource assisting Arabic EFL learners in addressing two aspects of word knowledge, semantic prosody and collocational behavior.

1.2 Purpose of the study

The current dissertation seeks to explore the effectiveness of parallel corpora in addressing two linguistic aspects of word knowledge that have been found to be challenging for second language (L2) learners: semantic prosody and collocational behavior. Regarding the first one, semantic prosody, several interlinguistic studies emphasized the vital importance of semantic prosody in effective communication and that ESL/EFL students are prone to pragmatic errors because of their ignorance of semantic prosody. Therefore, the goal of this dissertation is

to explore if, and to what extent, the parallel corpus (Reverso Context) can assist EFL Arabic L1 student translators in their perception of the semantic prosody of specific English lexical items that belong to three different grammatical categories (verbs, adjectives, and adverbs).

Also, the current dissertation is intended to explore the effectiveness of parallel corpora in developing collocational competence avoiding collocational clashes between the two languages (English and Arabic). A parallel corpus is assumed to be useful in this study because it will assist student translators in overcoming most of the issues in collocation translation that have been reported in previous research: (i) to ensure that they understand the collocations very well in their native language to avoid misinterpreting the meaning of collocations, which is one of the pitfalls of collocations translation as Baker (1992) notes, (ii) to extract L2 possible collocation translations and filter out the semantically irrelevant ones in case of polysemous words, (iii) to increase their awareness of how collocations differ in both languages (Farrokh, 2012), which in turn, will help them to avoid L1 transfer (Farghal and Obiedat, 1995), and (iv) to provide them with a wide range of translations to see how the problem of non-congruency in collocations were handled by professional translators so that they can go back to their L1 counterparts to see which one is more appropriate with the context in hand. Also, the parallel corpus can be used as a starting point since a student may not know or may not be able to recall the translation of either component of a collocation.

1.3 Significance of the study

Even though the phenomenon of semantic prosody of near synonyms has received some attention in corpus linguistics at the monolingual and crosslinguistic level, no study to date has investigated this phenomenon in translation teaching using a general parallel corpus. It is,

therefore, legitimate to pose the question of whether a parallel corpus is an appropriate tool that can help student translators to identify semantic prosody of a particular word. Although previous studies have shown evidence that corpus data is the only way to identify semantic prosody (e.g., Louw, 2000; Stewart, 2010; Zhang, 2010), it is of paramount importance to see if student translators in a classroom setting and not just corpus linguists can read corpus data and notice the subtle evaluative meanings embedded in contexts to avoid undesirable implications in the target language. Even though the focus of this study is on translating semantic prosody, I think it is necessary to study the effectiveness of parallel corpora in semantic prosody identification. In other words, does the integration of semantic prosody in a classroom setting can help novice translators (i) to avoid pragmatic errors due to the lack of knowledge in the prosodic behavior of near synonyms (Zhang, 2009), (ii) to avoid “altering or blurring the meaning or perhaps with an unintended comic or ironic effect” (Zethsen, 2008, p.259) when doing a translation task, especially if a word has a strong positive/negative semantic prosody as Bednarek (2008) indicated, and (iii) to convey the hidden evaluative quality more effectively in the target language as in “the war broke out”, in which the unfavorable attitude is much stronger than “the war started” (Stewart, 2010)? Then, the next step is to investigate how ESL/EFL learners can translate semantically similar sentences in which one involves a word that has been assigned a semantic prosody while the other does not, which is beyond the scope of this dissertation.

The other issue that this dissertation seeks to investigate is the potential of Reverso Context for collocation teaching. It is widely acknowledged that collocations are problematic even for highly proficient English learners. However, in addition to the scarcity of studies comparing corpus-based collocation instruction to non-corpus based methods (traditional

methods), most existing research concerned with the potential of corpus-based collocation teaching includes small-scale tests with no clear distinction between word combinations (e.g., read a book) and real collocations (e.g., break a promise). In addition, the collocations used in these studies differ in terms of congruency; all of these studies used both congruent collocations (collocations that have a direct equivalent in speaker's L1) that students usually have no problem in producing them (Awaj, 2018), and non-congruent collocations, which have been found to be more challenging for L2 learners than the congruent ones and hence deserve more attention by ESL/EFL teachers (Schmitt 2000; Vasiljevic, 2008; Nesselhauf, 2005). Moreover, there is no study – to our knowledge – that considered using a general parallel corpus in collocation teaching in a classroom setting despite the apparent potential of parallel corpora in translation pedagogy, and the appropriateness of such a corpus for low-to-intermediate level students. Therefore, this dissertation aims at investigating the extent to which a parallel corpus can aid student translators in collocation translation. Also, the overall purpose of this dissertation is to investigate both learners' and instructors' experience in using a parallel corpus for collocation-translation purposes.

1.4 Research questions

Having reviewed the literature for informing and situating my research, I will address the following research questions as a way to improve practical uses of parallel corpora for SP identification and collocation translation teaching:

1. How can a parallel corpus (Reverso Context) help with the tasks of semantic prosody identification and non-congruent collocation translation as a resource that could potentially take students beyond bilingual dictionaries and intuition?

2. To what extent can a parallel corpus (Reverso Context) be useful in understanding semantic prosody and collocational behavior and of near synonyms?
3. To what extent do translation teachers and students find a parallel corpus useful and helpful in dealing with the problems that are related to semantic prosody and collocational behavior? What strategies do students use to overcome such problems?

1.5 Outline structure of the dissertation

In addition to the first chapter (introduction chapter), the remaining five chapters will be organized as follows. Chapter 2 provides an overview of previous literature on semantic prosody and collocation behavior. This chapter is divided into three main sections: the first one is devoted to the common types of corpora used in translation teaching: monolingual corpora, comparable corpora, and parallel corpora; the second section provides some background of Semantic Prosody (SP) along with the different lines of research of SP; the third section discusses the different types of collocations and corpus-based collocation instruction. Chapter 3 shows the methodology adopted in this study and a detailed description of the three tasks (multiple-choice task, acceptability-judgement task, and the translation task) used in this research. It also outlines how the data in these three tasks was analyzed. Chapter 4 provides a short report of the statistical analysis outcome of the three tasks. In addition, this chapter offers a detailed description of the interview data concerning the participants' experiences with the pedagogical intervention and the implementation of the new parallel corpus they have been introduced to. Chapter 5 ties the findings of this study with the previous literature on semantic prosody and collocational behavior, and to what extent these results align or contradict with previous literature. Finally, chapter 6 describes the key findings of the current study with some concluding remarks. It also

sheds light on some limitations of this study, and provides some gaps and tips for future researchers.

CHAPTER 2: LITERATURE REVIEW

2.1 What is a corpus?

The term *corpus*, which is pluralized as *corpora*, was originally used to reference a processed or unprocessed set of texts written by a specific author (Baker, 1993). However, according to Baker (1995), this definition has been modified overtime into three different dimensions: (i) a corpus nowadays is used to include texts written in an electronic format so that they can be analyzed and manipulated easily; (ii) a corpus is not confined to written texts but may include both written and spoken texts as well; (iii) finally, a corpus can be written by multiple authors, and the texts may belong to different genres.

According to Bowker (2002), the term *corpus* refers specifically to a large set of electronic texts that have been collected based on specific criteria. This definition points to three characteristics of a corpus: large, electronic and written based on specific criteria. The first feature 'large', as Bowker (2002) indicated, is a vague one; there are no specific rules for how large a corpus should be. It depends on the project on which a person is working. Also, a corpus has to be electronic so that data can be consulted and manipulated easily using corpus-analysis tools such as AntConc (a program that analyzes electronic texts to discover patterns in a language). Finally, a corpus should not be created out of texts that have been selected randomly. For instance, a researcher who wishes to create a corpus for translation training might want to include texts produced in a specific time frame that belong to a particular topic. In what follows, three main types of corpora that have been commonly used in the translation pedagogy will be presented followed by their strengths and limitations.

2.2 Corpora in translation pedagogy

Translation is considered one of the linguistic fields upon which corpora had a great influence (Zanettin, Bernardini, & Stewart, 2014). Interest in the use of corpora in the field of translation emerged in the early 1990s, with a few studies advocating corpus-based approaches for translation teaching among researchers such as (Baker, 1993, 1995; Aston, 1999; Sinclair, 1995). In the last decade, the use of corpora in translation teaching has been widely adopted by many researchers (Awal et al., 2014; Bernardini, 2004; Bernardini & Castagnoli, 2008; Frérot, 2016).

The main objective of using corpora for translation training is that they provide student translators with enormous authentic texts that cannot be found in dictionaries, which typically contain very limited texts that are often made up by lexicographers (i.e., professionals whose job is to write and edit dictionaries). Since it is very unlikely to find balanced bilinguals, these authentic texts can assist translators in developing and evaluating different interpretive strategies (Bowker, 2000). Also, one of the main benefits of corpora in the field of translation is that they assist students in producing more accurate translations in terms of word choice and idiomatic expressions (Bowker, 1998, 2000; Bowker & Pearson, 2002). Through monolingual, parallel and comparable corpora, translation teachers and students can gain insights by observing how professional translators deal with common translation issues, and what type of strategies they use to overcome such issues (Bernardini et al., 2003, Bernardini 2004; Hunston 2002; Olohan, 2004; Pearson 2003; Zanettin et al., 2014).

Researchers' interest in using corpora in the field of translation was either: (i) to identify the characteristics of the translated text by comparing the original texts with their translated

counterparts, and these types of studies are known as descriptive translation studies; or (ii) to investigate the potential of using corpora to facilitate the translation process, which are known as practical translation studies (Bowker 1998). Even though both types of translation studies are key areas of research in translation, there are growing appeals for the practical application of corpora - the primary concern of our project here. In fact, various types of corpora have been incorporated into translation studies to overcome translation problems. Among these, as Zanettin et al., (2014) indicated, are three types of corpora (i.e., monolingual corpora, comparable corpora, and parallel corpora) that are considered as the most commonly ones that have been used and recommended in translation training, which are examined and evaluated for their usefulness as potential resources in the following section.

2.3. Three types of corpora recommended for translation purposes

2.3.1 Monolingual corpora

Monolingual corpora, which are considered the most popular one among researchers, are conceived as a large collection of texts that belong to a wide range of genres written in one language (Aston 1999). There are two different types of monolingual corpora: target language (TL) and source language (SL) monolingual corpora. However, TL monolingual corpora have been widely used and recognized by many researchers as a reference tool to complement conventional resources such as dictionaries (Aston, 1999; Baker, 1995; Bowker, 2000). Monolingual corpora are viewed as valuable resources for translation teaching since they are large and easy to construct and provide information that reflects how a language is typically used (Vintar 2008).

Several advantages of monolingual corpora in translation have been reported in the literature. For instance, Bowker (1998) conducted an experiment using specialized monolingual corpus on two groups of students: the participants in the first group were asked to translate a text using traditional resources such as dictionaries, while the participants in the other group were asked to translate the same text using a monolingual corpus as a complementary resource in addition to corpus analysis tools such as WordSmith. The results of this experiment showed that corpus-aided translations were higher in terms of quality, especially in terms of accurate word choice and the use of idiomatic expressions.

Target language (TL) monolingual corpora have been investigated by Bowker (2000) for their usefulness as a translation resource by comparing and contrasting two texts: one that was translated with the help of traditional resources, and one that was translated using a specialized target language corpus. The results of this study showed that corpora have a lot to offer, especially when they are used with corpus-analysis tools such as WordSmith. The numerous contexts in monolingual corpora could provide translators with a lot of information pertaining to appropriate word choice and appropriate linguistic usage. The study pointed out that translators need to be acquainted with the drawbacks of using conventional resources for translation purposes. For instance, upon doing the translation task, those who used the traditional resources were interviewed to share their experiences about the difficulties they faced during the translation task. They actually reported a number of difficulties they encountered. These difficulties are typical drawbacks of using traditional resources, as Bowker (2000) indicated. These difficulties include: (i) inability to identify the exact TL terminology, (ii) inability to find all terminologies in a dictionary, (iii) spending a lot of time searching for the appropriate usage

pattern, and (iv) limited information regarding the usage of lexical items. In contrast, those who used both resources (i.e., the specialized monolingual corpora + the dictionary) were able to overcome most of the aforementioned difficulties that the first group had in addition to high accuracy in terms of translations and usage of idiomatic expressions. The study concluded by saying, “Although corpora and corpus processing tools will not replace translators, translators who use these resources are likely to replace those who don’t” (Bowker, 2000, p. 37).

Even though general monolingual corpora can be useful as a reference tool for translators, they pose some problems. According to Aston (1999), these problems includes, but are not limited to: (i) not all languages have well-balanced and representative corpora, which makes it impossible to evaluate and generalize based on a few occurrences of a word, (ii) it is difficult to obtain appropriate instances of polysemous words such as *bank*, and (iii) it might be difficult to analyze and classify concordances due to the large number of data. These problems make the translation task more difficult and cumbersome, but these difficulties can be reduced by using a comparable corpus, which is considered more specialized since it contains texts of a specific type or genre. This type of corpora will be explained and evaluated in the next section.

2.3.2 Comparable corpora

A comparable corpus is so called since it refers to two sets of non-translated/original texts that are similar in nature (Baker, 1995; Bowker 2004). In fact, the two sets of texts used in a comparable corpus might be the same or of different languages (Aston 1999). There are actually three types of comparable corpora, but as Bowker (2000) indicated, the most common one that is valuable for translation teaching consists of a collection of non-translated/original texts in language A, and a collection of non-translated/original texts in language B; both are similar in

one or more attributes such as subject field, text type, etc. These types of corpora have been advocated for their usefulness in raising translators' awareness of TL conventions (Giampieri, 2018). Also, they can be used jointly with parallel corpora to dispel doubts in translations since they provide evidence of how technical terms are used in native-speaking countries.

As stated earlier, one of the limitations of monolingual corpora is that they can provide translators with the typical and natural usage of words in the target language only. Comparable corpora, by contrast, can provide translators with a deeper understanding of both languages (the source and target language). Through using a comparable corpus, students will have the chance to “compare terminology, phraseology and textual conventions across languages and cultures” (Zanettin et al., 2014, p. 6). Even though most comparable corpora are smaller in size and contain texts belonging to a particular domain, they have a clear advantage over monolingual corpora. Therefore, it has been recognized and used by some researchers in translation teaching (e.g., Aston 1999; Rodríguez-Inés, 2012; Zanettin, 2001).

One of the studies that has been carried out to investigate the usefulness of comparable corpora for translation education was conducted by Zanettin (2001). In his study, Zanettin (2001) conducted a study using an English-Italian comparable corpus containing a collection of newspaper articles. In this study, the participants, who were undergraduate native speakers of comparable Italian, were asked to translate a specific part of an Italian newspaper article into English using a comparable corpus and a concordancing software. The results cast a new light on how the use of “ready-made chunks of language” found in the comparable corpus guided students to adjust and link these readily available chunks to create the desired meaning (Zanettin, 2001, p. 186). In addition, the results of this study showed that students were able to see how two

different cultures deal with topics within the same domain. Put differently, translation exercises showed that comparable corpora enhanced students' awareness of possible equivalents in both languages by consulting concordances that can increase the degree of certainty of contextually appropriate translations.

Similarly, Zanettin (1998) used a bilingual comparable (English - Italian) corpus to illustrate how comparable corpora can be utilized in classroom translation activities to enhance students' comprehension and production skills. In line with previous studies (e.g., Zanettin 2001), students were able to see the recurring collocational patterns in the target language and produce translations that sound native-like. Furthermore, the findings showed that comparable corpora can suggest possible solutions to some translation problems, confirm specific translations, and increase their sensitivity towards the diverging patterns in both languages. The study concluded with the importance of the integration of a larger corpora since comparable corpora, which are usually limited in size, provide translators with a repertoire of recurring structural features in both languages that may lead to a bias in establishing equivalence between the two languages (Zanettin, 1998).

Even though the merits of comparable corpora have been widely acknowledged in the field of translation education, there is another type of corpora known as "parallel corpora" allowing students to see actual examples that have been translated by professional translators, which is the one that will be used in this project. This type of corpora can provide solutions to more sophisticated issues that cannot be resolved using either monolingual or comparable corpora (Pearson, 2003). This type of corpora will be explained thoroughly in the following section.

2.3.3 Parallel corpora

Finally, the last type of corpora that can be incorporated into the translation teaching field is known as a parallel corpus, which is defined as a set of texts that are usually aligned on a sentence-by-sentence or a paragraph-by-paragraph basis in which one is a translation of the other (Zanettin, 2001). Even though the advantages of parallel corpora are obvious and recognized by many researchers, there are relatively a limited number of corpora of this type available (Bowker 1998, Liu, 2014). A reason for the scarcity of parallel corpora is attributed to the considerable effort required to compile such corpora. In order for a parallel corpus to be really useful for translation purposes, it has to be large enough to not “give a distorted picture of the language they represent” (Teubert 1996, p. 247). Therefore, researchers opt for other types of readily available corpora not because constructing parallel corpora is technically problematic, but because it still requires a lot of effort to compile a sizable one (Bowker & Pearson, 2002).

In fact, parallel corpora can take two main forms: Unidirectional and bidirectional parallel corpora. The unidirectional parallel corpora includes original texts in the speakers’ L1 aligned sentence by sentence with their translated counterparts in the speakers’ L2. The bidirectional parallel corpora includes original texts in the speakers’ L1 aligned with their translated counterparts in the speakers’ L2 and vice versa. The latter one (The bidirectional parallel corpora) allows translators to exploit the bidirectionality to examine their intuitions using both target and source language.

Parallel corpora have been commonly used for language teaching and learning (Wichmann & Fligelstone, 2014; Granger & Lefer, 2016), but a relatively small number of studies have been conducted using parallel corpora for translation teaching (see Baker, 1995; Olohan, 2004;

Sinclair, 1995; Singer, 2016) despite the acknowledgment by researchers for the usefulness of parallel corpora over the other types of corpora. These studies that have been conducted using parallel corpora pointed to several advantages that translators can gain by comparing the original texts with their translated versions, which cannot be found in either comparable or monolingual corpora. Pearson (2003) stated that parallel corpora are very crucial in the translation process for several reasons. **First**, parallel corpora allow translators to see actual examples enabling novice translators to observe how professional translators behave, especially in cultural- or linguistic-specific terminologies. **Second**, parallel corpora allow translators to see how much information professional translators transfer or omit during the translation process. **Third**, as Aston (1999) stated, one of the advantages of parallel corpora is that when novice translators attempt to translate a new piece of terminology, they can generate their own translations and compare that against the existing translation. However, this is not possible with comparable corpora. That is, with comparable corpora, translators need to search in similar contexts for possible equivalents. They actually have to go through a number of possible translations, and further limit the number of hits to be able to come up with the most accurate translation. This process, as Aston (1999) stated, consumes a lot of time and is prone to errors.

Despite their scarcity, previous studies with parallel corpora encourage the integration of parallel corpora in the translation process. Recently, a series of studies advocated the use of specialized parallel corpora in the classroom for translation teaching. Li and Dai (2014) examined the usefulness of a corpus-based translation teaching approach using English-Chinese parallel corpus. In their study, the participants were divided into two groups: one group (the experimental group) was introduced to a parallel corpora and a corpus-analysis tool (i.e.,

ParaConc) and were asked to explore it more on their own; the other group (the control group) was taught translation through conventional resources such as bilingual dictionaries. A pre- and post-test showed a great improvement in the translation competence of those who were exposed to corpora. The study concluded that allowing their students to compare different translations and make their own choices can provide students with extra material in addition to materials provided by teachers. Also, their study pointed out that the use of parallel corpora created a corpus-based discussion allowing students to actively participate in class (Li and Dai 2014).

Similarly, a very recent study conducted by Liu (2020) investigated the effectiveness of parallel corpora compared to traditional reference works (e.g., dictionaries) using a mixed research design. This study found a significant improvement in the experimental group compared to the control group in many respects including but not limited to accurate word choice, spelling, and phraseology, especially with L1-L2 translation direction. The usefulness of the parallel corpus in one translation direction (L1-L2) direction indicates that “the advantage of the parallel corpus lies in the encoding rather than the decoding process, thus the use of parallel corpora can benefit L1-L2 translation more than L2-L1 translation” (Liu, 2020, p.143). Interestingly, the findings of this study indicated that the participants were able to overcome the foreign “cultural barriers” that EFL students usually lack (p.139). Other researchers have also found similar results with parallel corpora incorporating other languages (Rodríguez-Inés, 2014; Salhi, 2013).

Previous studies discussed here highlight the importance and praise the merits of integrating a parallel corpus for translation teaching. Even though researchers are aware of the benefits that a parallel corpus could bring, it was the least studied one compared to the other types of corpora. The scarcity of studies is attributed to a number of technical difficulties such as

accessibility or copyright issues that prevented researchers from using or creating a sizable one with a variety of texts that can be representative of both languages (Liu, 2014). However, thanks to the advancement of computer technology, a large parallel corpus (Reverso Context) providing a wide range of texts that belong to different genres was recently created, which will be used for translation teaching in this dissertation. The following section sheds light on the potentiality and limitations of using parallel corpora resources in the field of translation education, and how this newly created corpus can overcome these technical or representativeness issues.

2.4 Parallel corpora and their potentiality for translation teaching

Since novice translators, who are not expert enough in their L2, need to make the translated texts comprehensible to L1 audience, a large set of texts need to be consulted for the output to be lexically, culturally, syntactically, and semantically comprehensible. Comparing a large set of texts with their translated counterparts allows students to observe how a word can be used in different contexts, and how it is contextually appropriately translated. However, as stated earlier, due to technical reasons (i.e., accessibility, copyright issues, representativeness, etc.), currently available parallel corpora, especially Arabic-English parallel corpora, are usually limited in size and provide a limited snapshots of language use, so they fail to provide a comprehensive picture of how each word in the SL should be appropriately translated. However, the ongoing parallel corpus used in this dissertation is large enough for the current translation task.

The other limitation of bilingual parallel corpora, as Zanettin (1998) observed, is that “the translated texts cannot represent the full range of linguistic possibilities of the target language and that they may reflect the stylistic idiosyncrasies of the source language and of individual translators” (p.2). However, the multi-source parallel corpus used for translation training in this

dissertation contains a large number of texts that are sufficiently varied in genres so that student translators can observe recurring linguistic patterns, and observe how translators establish equivalence between languages.

In addition, one of the main problems discussed in previous studies with Arabic-English parallel corpora is that they are not balanced (i.e., they do not have a comparable number of texts in each genre), which affect their representativeness. In order to overcome this difficulty and increase the representativeness of a corpus, the compilers of the parallel corpus (Reverso Context) took into consideration the two factors affecting representativeness in a corpus, which are balance (i.e., the diversity of genres used in a corpus), and sampling (i.e., the diversity of text types used in these genres). The parallel corpus used here includes a wide range of genres (e.g., scientific, medical, legal, religious, etc.), and the texts used in these genres are very diversified.

2.5 Semantic prosody and corpus data

2.5.1 What is semantic prosody?

The term ‘semantic prosody’ was coined by Louw (1993). This term has been linked by Louw to Firth’s (1957) idea of phonological prosody. The analogy is that in phonological prosody, phonemes are realized differently based on the phonemes adjacent to them due to a process called “phonological coloring” (Louw, 1993, p. 158.). In this process, the mouth is prepared for the next sound leading to a different realization of the same phoneme. Similarly, there are particular expressions or words, as Louw (1993) claims, that prepare the reader or listener for the discourse following them, which can be either positive/pleasant or negative/unpleasant, which Louw (1993) termed as ‘semantic prosody’.

The notion of semantic prosody was initially introduced by Sinclair who observed that certain verbs such as *happen* tend to occur in unpleasant situations (e.g., the accident/ incident/ attack happened yesterday), which was very salient in corpus data (Sinclair 1991). The term *semantic prosody* (also known as pragmatic prosody) has been defined slightly differently by various researchers. Louw (1993) defined semantic prosody as “a consistent aura of meaning with which a form is imbued by its collocates” (p. 157). In his view, semantic prosody is a diachronic process as the word “imbue” in his definition indicates, which is that the semantic prosody might change over time (Stewart, 2010). In his work on semantic prosody, Louw (1993) found that words such as *utterly* occur mostly in unfavourable contexts due to the words it collocates with (e.g., *utterly ridiculous* is more frequent than *utterly wonderful*).

Similarly, Bublitz’s (1996) definition of semantic prosody is consistent with Louw’s (1993) idea of semantic coloring. Bublitz’s (1996) who investigated the habitual co-occurrences of several words such as *cause*, *happen*, *commit*, and *somewhat*, found that these words collocate predominantly with unpleasant words such as *suicide*, *crime*, etc. However, Bublitz (1996) indicated that semantic prosody does not always apply to all meanings of polysemous words such as *commit*. Put differently, the word *commit*, which mostly occurs in a negative context, has what Bublitz calls “by-chance-meaning” as in ‘they commit to each other’ (p. 17). In this case, the negative semantic prosody is not manifest because the semantic prosody differs based on the basic meaning of a word (Bublitz, 1996). In other words, each sense of a word may have a different semantic prosody.

Consistent with the previous definitions, Partington (2004) views semantic prosody as a kind of “evaluative meaning” that is “spread over a unit of language which potentially goes well

beyond the single orthographic word and is much less evident to the naked eye” (p. 131). This definition emphasizes the role of concordance lines that can help infer the meaning. The inability of observing semantic prosody by looking at the word itself has been emphasized by several researchers (e.g., Hunston, 2002; Bublitz, 1996; Stubbs, 1995). Only by going through a number of instances where a word was used, can the semantic prosody be observed. Even native speakers’ intuitions are not accurate to indicate whether a word has positive or negative semantic prosody (Bublitz, 1996). Therefore, in this study, the participants will be required to use concordance lines to obtain the semantic prosody.

2.5.2 Characteristics of semantic prosody

According to Stewart (2010), the previous attempts to define semantic prosody can be summarized into two main features that are common to all these definitions of it. First, unlike the broader argument-structure idea of semantics “selectional restrictions”, semantic prosody is attitudinal or evaluative since it expresses the speaker's or writer’s attitude towards something, which can be either positive, negative, or neutral. Second, semantic prosody is hidden; several texts need to be consulted and translated into semantic prosody. With the advent of corpora, semantic prosody can be observed using appropriate softwares to extract all instances of a word. Therefore, semantic prosody strongly hinges on the lexical environment of an item and is thus identifiable through corpus data.

To illustrate the first feature (the evaluative meaning/function/role), let’s take an example of two near synonyms (cause and bring about) that have been assigned opposing semantic prosodies in previous studies. As Stubbs (1955) indicated, the first one (cause) has been predominantly associated with words such as death, accident, etc., indicating that this word has

been evaluated as negative by the speakers or writers of these sentences. On the other hand, the other phrase (bring about) tends to occur in positive contexts to refer to favorable results (Louw, 2008). However, the evaluative function/meaning is not constant; it actually depends on the speaker's intent/evaluation of the utterance. For instance, there are a few cases in which a phrase such as *bring about* that is frequently associated with positive words can be used in a negative context without infringement/break of its semantic prosody. Louw (2008) gave an example using the phrase *bring about* that was used with the word *death* by a euthanasiaist, but it was evaluated as positive "since death is 'positive', in the context of pain and suffering, (in the eyes of euthanasiaists)" (McGee, 2012, p. 170). There are other cases that include a real violation of the semantic prosody pattern of a word to convey irony or humor (Louw, 1993), which is beyond the scope of our study.

The occurrence of a word such as "break out" that has a negative SP in a negative context is considered to be the conventional usage (no extra meaning is implied), and it conveys the attitudinal stance of the speaker more effectively than using another word with a neutral SP (Stewart, 2010). However, there are unconventional cases created by flouting Grice maxims. For instance, if a verb such as "break out" that has a negative SP is used in a positive context such as "the peace broke out", another layer of meaning could be intended, irony in this case (Stewart, 2010). In other cases, the deviation from the conventional usage as McGee (2012) pointed out could be idiomatic as in "the laughter broke out". In fact, as Stewart (2010) noted, it is impossible to identify the real reason as to why some occurrences depart from the typical conventional usage of a word since a corpus provides us with examples not interpretations. However, it is important to note that these examples are the exception, not the norm. That is,

usually most corpus data should conform with the observed SP of such words whenever they occur (McGee, 2012).

It is worth mentioning that there is another class of words known as expressives (e.g., epithets such as *the jerk*, *damn*, etc.) that, as with semantic prosody, show positive or negative evaluative attitudes; however, these two classes of words differ in many respects. First, the evaluative component that expressives convey is an additional layer of meaning added to the content of an utterance (Potts, 2007), but a specific semantic prosody is part of a word's general functioning; it can convey an additional level of meaning only when their prosodic behaviors are flouted (Stewart, 2010). Second, unlike with semantic prosody where if a word such as "undergo" was used in a positive context, an ironic effect could be achieved, if an expressive element was juxtaposed with another word that has an opposing attitude, several pragmatic effects could be achieved such as irony, expressing intimacy, etc., (see Yoon 2015 for more details). Third, in semantic prosody, the prosodic behavior of words such as "cause" is a tendency generally in a single direction, while the evaluative attitude of an expressive element such as "fucking" that has a strong negative expressive meaning could be used to express a strong positive attitude as in following examples from Yoon (2015, p.63):

1. That fucking bastard Burns got promoted again!
2. That's really fucking brilliant!

Fourth, the negative/positive semantic prosody of a word seems to be really hidden. That is, the denotational definition is semantically neutral, and the evaluative function is conveyed

unconsciously; only through corpus data semantic prosody can be identified. On the other hand, expressive elements have evident positive/negative evaluations and hence exploited intentionally.

The second feature that is fundamental to the notion of semantic prosody, as noted above, is 'hiddenness'. Part of the meaning of the hiddenness feature refers to the unavailability of prosodic information in dictionaries (McGee, 2012). The omission of prosodic information in dictionaries has been observed by some researchers such as Stubbs (1995) who found that the word *cause* was defined neutrally without any negative evaluation. Also, Sinclair (1998) found similar results for the word *budge* in which no indication to its negative semantic prosody was found. Also, the hiddenness feature, as McGee (2012) indicated, can be better understood by comparing semantic prosody with connotation. Put differently, connotation can be observed when words such as *slim* 'attractively thin' is used in isolation compared to 'bring about' that is semantically neutral but has a positive semantic prosody even though "there seems to be no 'inherent' goodness in the phrase" (McGee, 2012, p.171). Stewart (2010) pointed out that the hiddenness feature is attributed to the apparent semantic neutrality (no un/favorable meanings) associated with items such as *bring about*. In other words, "the whole concept of semantic prosody is called into question, if the hidden-ness element is not maintained" (McGee, 2012, p. 172). In addition, Zhang (2009) pointed to the hiddenness of semantic prosody by saying that "semantic prosody does not belong to speakers' conscious knowledge of a language. Only through interpreting large numbers of instances of a word or phrase can we observe semantic prosody" (p. 3).

Despite the importance of the hiddenness feature, there are a few words whose semantic prosody is less hidden than others such as *commit* whose negative semantic prosody seems more

transparent than words such as *bring about*. Therefore, such words that have a low degree of hiddenness were not included in this study. The other reason for excluding this word is that it is a polysemous word (it has more than one meaning) and only one meaning is associated with negative words as Stewart (2010) pointed out.

Hunston (2007, p. 250) pointed out that there are some “sites of disagreement regarding the features of semantic prosody”. The first one is whether semantic prosody is a “property of a word” or “belongs to a unit that is larger than the word”. The second point is related to how semantic prosody should be described? Some researchers (e.g., Partington) supports the view that semantic prosody should be either positive or negative, while others (e.g., Sinclair) pointed to the difficulty of doing such distinction for all meanings of a word. Even though there are some areas of disagreement among researchers, the two features of semantic prosody (hiddenness and evaluative meaning) are acknowledged by all researchers. In this dissertation, we will follow Louw’s approach of semantic prosody for two reasons:

(i) it is the most common understanding of semantic prosody in the literature, as Stewart (2010) pointed out. According to this approach, semantic prosody is a property of the word that is observed by looking at the habitual co-occurrences of a word.

(ii) semantic prosody in Louw’s approach is conventionally divided into two prosodies: favourable/positive and unfavourable/negative prosodies, which is relatively less problematic for students than dividing words into different semantic sets as in Sinclair’s (2004) approach (Stewart, 2010).

2.5.3 Corpus-based studies of semantic prosody

The advent of technology in data analysis allowed researchers to investigate semantic prosody with reference to corpus data. Several monolingual and a few bilingual studies explored the semantic prosody of specific lexical items by probing corpus data (e.g., Sinclair, 1991; Louw, 1993; Stubbs, 1995; Partington, 1998; Channell, 2000; Tognini-Bonelli, 2001; Xiao & McEnery, 2006). Semantic prosody is beyond human intuition, and it only can be detected by consulting a huge number of examples of a word (Louw, 1993). Hunston (2002) maintains that “semantic prosody can be observed only by looking at a large number of instances of a word or phrase, because it relies on the typical use of a word or phrase” (p.142). These remarks indicate that the inference of the semantic prosody of a word hinges upon its habitual co-occurrences in a corpus.

Most corpus-based studies that investigated semantic prosodies were mainly monolingual focusing on English lexical items. One of the early studies on semantic prosody was conducted by Sinclair (1991) who analyzed the semantic prosody of the phrase “set in”. His findings revealed that this phrase usually collocates with negative words such as rot, decay, and prejudice. Likewise, Partington (1998) found that the word “commit” has a negative semantic prosody since it habitually co-occurs with clearly negative words such as crime and suicide. Stubbs (1995) who investigated the semantic prosody of “cause” noticed that more than 90% of the words that this verb co-occurs with are clearly negative (e.g., accident, crisis, cancer, death, damage). Other researchers have investigated the semantic prosody of other lexical categories besides verbs, including adverbs and adjectives. Louw’s (1993) investigation of the semantic prosody of the word “utterly” showed that this word has a negative semantic prosody due to the words with which it occurs such as confused, meaningless, and terrified. Stubbs (2001) who

analyzed the semantic prosody of “mutual” found that this word has a favourable semantic prosody. Words that have positive semantic prosody such as launch, career, and mutual are comparatively less common than those that have been assigned negative semantic prosody (Stewart, 2010).

A very few studies investigated the semantic prosody in other languages, while other studies compared semantic prosodies cross-linguistically (e.g., Dam-Jensen and Zethsen, 2008; Sardinha, 2000; Tognini-Bonelli, 2001; Xiao and McEnery, 2006). For instance, Sardinha (2000) looked at two English lexical items (i.e., *cause* and *happen*) that have predominantly negative semantic prosodies and compared them to their equivalents in Portuguese (i.e., *causar* and *acontecer* respectively). The study found that both *cause* and *causar* tend to collocate with negative words, situations, or events. On the other hand, the analysis of *happen* and *acontecer* showed that these verbs have different semantic prosodies. Even though the verb *happen* has a clear negative semantic prosody, this study found that the verb *acontecer* in Portuguese collocates with either positive or neutral words or events. There are other similar studies that investigated semantic prosody crosslinguistically. Partington (1998) also compared *impressive* to its counterpart in Italian, *impressionante*. The word *impressive* in English has been proven to have a favorable semantic prosody since it collocates with words such as talent and achievement, but *impressionante* in Italian has unfavourable semantic prosody; it has been found to collocate with price rises and kidnap attempts. Xiao and McEnery (2006) also investigated the prosodic behavior of near synonyms in English and Chinese (result, outcome, consequence, and aftermath). The findings of this study indicate that these words have similar semantic prosodies

in both languages. All of these studies came to the same conclusion that semantic prosodies of synonyms and near synonyms are unpredictable and vary greatly across languages.

The un-interchangeability of semantic prosody cross-linguistically poses a problem for L2 learners (Xiao and McEnery, 2006). Therefore, L2 learners should become aware of these hidden semantic prosodies by consulting concordance lines to transfer them into semantic prosody. Stewart (2009, p.29) who studied semantic prosody in classroom settings pointed to this issue by saying that semantic prosody is “a reality that translators are required to address, otherwise important source text elements will be left unaccounted for”. Studies that examined how semantic prosody is represented in bilingual dictionaries (e.g., Ji and We, 2000) found that none of the examples provided in the dictionary showed that a phrase such as *set in* has a negative semantic prosody. In the same study, Ji and We (2000) who investigated the representation of semantic prosody of *rife* found that this word that has been proven to be associated with negative semantic prosody was used in a positive context in the dictionary. Similar results were found in English-Chinese bilingual dictionaries (Wang, 2004). Even though researchers acknowledged the value of semantic prosody and how dictionaries may mislead L2 learners, very little research has been done on how L2 learners can identify semantic prosody using more accurate resources such as corpora, which is the goal of this project. A few studies have been conducted on semantic prosody in ESL/EFL learners, which will be explained in the following section.

2.5.4 Semantic prosody in ESL/EFL learners

Even though there is considerable literature on semantic prosody in ESL/EFL students, most researchers focused mainly on the contrastive aspect of semantic prosody (e.g., Lu, 2005;

Wang, 2019). In other words, these studies provided a contrastive analysis on the prosodic use of English words by ESL/EFL students compared to native speakers of English. The goal of these studies was to examine the behavior of ESL/EFL students in using synonymous words in English such as *gain* and *obtain* that are denotationally similar but pragmatically different (they have opposing semantic prosodies).

Lu (2005) who investigated how *gain* and *obtain* are used by Chinese students compared to that of native speakers found that native speakers treat these words differently; *obtain* was found to collocate with different sorts of words resulting in a neutral semantic prosody, while *gain* was found to collocate with favourable words resulting in a positive semantic prosody. Compared to native speakers of English, the learner corpus of Chinese speakers showed that Chinese speakers were treating the two words as if they had positive semantic prosodies. This study concluded with the crucial role of corpora in language teaching since they provide students with authentic texts showing them how a word should be used appropriately. A similar study was conducted by Wang (2019). In this study, Wang (2019) did a contrastive study by looking at how the words *motive* and *motivation* were used by native speakers and Chinese speakers of English. The findings of this study revealed that Chinese speakers misused the semantic prosody of both words to some extent. Even though the word *motive* is associated with negative semantic prosody, Chinese speakers underused the negative semantic prosody, which in turn, made it as if it had a neutral semantic prosody. By contrast, even though the word *motivation* seems to be neutral in the Corpus of Contemporary American English (COCA), Chinese speakers overused the negative side of it making it sound more negative than it should be. Both studies suggested integrating semantic prosody in ESL/EFL vocabulary teaching, especially in advanced levels.

There are other studies (e.g., Xiao & McEnery, 2006; Zhang, 2009; Ahmadian, Yazdani, and Darab, 2011) that found similar results, so errors related to semantic prosody are extremely common among ESL/EFL learners of English.

Researchers have reported several of reasons for teaching semantic prosody to non-native speakers: (i) non-native speakers are required to learn semantic prosody to communicate effectively with others (Xiao & McEnery, 2006), (ii) ESL/EFL instructors concentrate more on the denotational definition of a word and underestimate the crucial role of semantic prosody (Wei, 2006), (iii) as noted earlier, bilingual dictionaries provide inaccurate or misleading information regarding semantic prosody (Ji and We, 2000), (iv) one of the biggest challenges facing both teachers and students, as Zhang (2009) indicated, is learning the pragmatic aspect of a word (i.e., its prosodic behavior), and (v) most importantly, semantic prosody is one of the challenging issues that should be addressed in translation “otherwise important source text elements will be left unaccounted for” (Stewart, 2009, p.29).

A very recent study was conducted by McGee (2012) on Arabic-English teachers and students to investigate their semantic prosody awareness compared to that of native speakers of English. In this study, the participants were asked to use seven words for which a semantic prosody has been assigned by other researchers (i.e., bring about, cause, completely, face, potentially, provide, and regime). The participants were asked to use these words in three sentences to see whether they are aware of their semantic prosodies. The results for native speakers of English showed no violation of semantic prosody for all seven words. In contrast, the results for the non-native speaker groups (the teacher group and the student group) showed similar results for the first three words (cause, face, and provide). The data collected from the

rest of the words showed no difference between high level learners (English teachers) and low-level learners (students), except for the word *completely*. The findings of this study clearly indicate that even teachers who are proficient speakers of English may not be aware of semantic prosodies; the high accuracy in the first three words might be attributed to the degree of hidden-ness in semantic prosody for these words (McGee, 2012). In other words, in this study, L2 learners might have been aware of the typical use of these words but not aware of their semantic prosodies. However, a follow-up study is necessary to obtain more conclusive evidence. Therefore, increasing students' and educators' awareness toward semantic prosody is a necessity.

Even though previous studies (e.g., Xiao and McEnery 2006; Zhang, 2009; Ahmadian, Yazdani, and Darabi, 2011; McGee, 2012) with semantic prosody have found a lack of knowledge in terms of semantic prosody among ESL/EFL learners, very little research has been done on how semantic prosody should be integrated in vocabulary instruction. Only one study has been conducted to consciously teach the prosodic behavior of near synonyms (e.g., supply/provide, commit/perform) to ESL/EFL learners using BNC corpus that was conducted by Mansoory and Jafarpour (2014). In this study, the participants had 30 multiple-choice items, and they were asked to read a sentence and fill in the gap with the most appropriate choice. The findings of this study showed a statistically significant difference between the experimental group and the control group in the post-test showing a clear advantage of corpora such as BNC that was utilized in this experiment compared to regular dictionaries that the control group used. Even though the results of this study showed a clear advantage for the data-driven approach in teaching semantic prosody to EFL students, the study focused only on one grammatical category

(verbs), the study was conducted in a productive mode only, and the experiment was not followed by a one-on-one interview with both the teacher and the participants to further investigate the effectiveness of data-driven learning in greater depth. Therefore, more studies that fine tune the methodology are needed to investigate this neglected aspect of word usage using parallel corpus data, which is the goal of this dissertation. The next section deals with another dimension of word usage, which is knowing words' collocations.

2.6 Collocations

2.6.1 What are collocations

The term collocations was coined by Firth (1957) who adopted the quantitative approach to collocations. Stewart (2010) stated that collocation is “basically quantitative, entailing statistical significance and not mere juxtaposition” (p.85). Also, Baker maintained that

“all words co-occur with each other to some degree. However, when a word regularly appears near another word, and the relationship is statistically significant in some way, then such co-occurrences are referred to as collocates and the phenomena of certain words frequently occurring next to or near each other is collocation” (p.95-96)

Similarly, Hoey (1991) pointed to the importance of frequent co-occurrence and not just mere juxtaposition by saying collocation refers to “the relationship a lexical item has with items that appear with greater than random probability in its context” (p.6-7). The other approach, which we will follow in this dissertation is known as the lexical approach to collocations (Walker, 2011). According to this approach, researchers use different criteria to differentiate between free combinations and collocations, but the most widely shared criterion is the “arbitrary restrictions on substitutability” (Nesselhauf, 2003, p.225). In order to illustrate the difference between

arbitrary restrictions and semantically-motivated restrictions, Nesselhauf (2003), gave an example of semantically-motivated combinations such as “read a newspaper”. In this example, the verb “read” requires an object that has some text to be read. Therefore, “read a newspaper” is not arbitrary, and hence not an example of collocations; it is an example of free combinations. By contrast, a person can say “reach a goal” but not “reach an aim”. The unacceptability of the second one (i.e., reach an aim) is not due to semantic restrictions since both words (aim and goal) are semantically similar, but due to “a somewhat arbitrary convention of the language” (p. 225). This arbitrary restriction is a good indication that this is a good example of collocations. There are other cases in which it is difficult to determine whether the restrictions are semantically motivated or arbitrary such as “want a pen”; therefore, Nesselhauf (2003) suggested taking another step, which is looking at the restrictiveness of the sense of the verb. In other words, the meaning of the verb “want” in the previous example is not restricted in the sense that it can be used with an unlimited number of nouns with the same sense. On the other hand, if the sense of a verb (e.g., brush) is confined to a very limited number of nouns such as *teeth* and *hair*, then these verb-noun combinations are considered typical collocations.

Collocations have been categorized differently by researchers; these categorizations are based on either syntactic, semantic, or paradigmatic grounds. However, one of the most common and widely accepted categorizations of collocations was done by Benson, Benson, and Ilson (2010). According to Benson, Benson, and Ilson (2010), there are two main types of collocations: grammatical and lexical collocations—the second one is the primary concern of this study. The first type of collocations, grammatical collocations, consist of a word followed

immediately by a preposition or that-clause. Grammatical collocations are further subdivided into eight groups as follows: Adopted from Dokchandra (2019, p.777).

G1= noun + preposition e.g. blockade against, apathy towards

G2= noun + to-infinitive e.g. He was a fool to do it., They felt a need to do it.

G3= noun + that-clause e.g. We reached an agreement that she would represent us in court., He took an oath that he would do his duty.

G4= preposition + noun e.g. by accident, in agony

G5= adjective + preposition e.g. fond of children, hungry for news

G6= adjective + to-infinitive e.g. it was necessary to work, it's nice to be here

G7= adjective + that-clause e.g. she was afraid that she would fail, it was imperative that I be here

G8= 19 different verb patterns in English e.g. verb + to-infinitive (they began to speak), verb + bare infinitive (we must work) and others.

The second type of collocations, which is lexical collocations is, as its name suggests, contains only content words. This type of collocation has several subtypes such as Verb+Noun, Adjective+Noun, Noun+Verb, Noun+Noun, and Verb+Adverb. Newmark (1981) stated that only three of these types happen to be the most widespread types of collocations in English, which are: (1) adjective-noun (Adj-N) collocations such as “pure chance”, (2) noun-noun (N-N) collocations such as “nerve cell”, and (3) verb-noun (V-N) collocations such as “make a decision”. Since this study is concerned with non-congruent collocations (collocations that cannot be translated word-for-word into the speakers' L1), only two types (V+N and Adj+N) of collocations are included; N-N collocations were excluded because they usually have a

word-for-word translation in the speakers' L1. Therefore, the translation of such collocations requires "reproducing in the receptor language the closest natural equivalent of the source language message, first in terms of meaning and secondly in terms of style" (Nida and Taber, 1982, p.12).

2.6.2 Corpus-based collocation instruction

One of the main obstacles facing non-native speakers including advanced L2 learners is the lack of collocation competence (Altenberg & Granger 2001; Lennon, 1996; Liu & Shaw 2001; Nesselhauf, 2003). Recent research on collocation instruction has been concerned with the extent to which a corpus-based collocation teaching can help L2 learners to increase their collocational competence (Chang and Sun, 2009; Gablasova et al., 2017; Jafarpour and Koosha, 2006; Jafarpour et al., 2013; Özbay, 2016; Postolea and Ghivirigă, 2016; Vyatkina, 2016) since collocation information is not well-represented in dictionaries (Sinclair, 1991). Following Brown's (1974) suggestion to teach vocabulary in context and as units (a word along with its collocations), almost all of these studies used monolingual corpora such as BNC or COCA to investigate the effectiveness of corpus-based instruction in increasing L2 collocation knowledge.

With the development of corpus linguistics, corpus-based collocation teaching has recently gained greater importance. The importance of corpus-aided collocation instruction lies in the importance of increasing naturalness and idiomaticity in ESL/EFL oral and written speech, which can be achieved by exposing them to abundant naturally-occurring data. Although teaching collocations explicitly using a traditional method such as "collocational grids" shown in figure (1) from Channell (1981, p. 120) can be very helpful, the information that the collocational grids

provide are very limited; they do not include all linguistic aspects of usage (e.g., pragmatics, semantic prosody, etc.) as Nesselhauf (2005) indicated.

	woman	man	child	dog	bird	flower	weather	landscape	view	house	furniture	bed	picture	dress	present	voice
handsome		+									+				+	
pretty	+		+	+	+	+		+	+	+		+	+	+		
charming	+		+							+				+		+
lovely	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+

Figure (1): collocational grids

Therefore, monolingual corpora such as COCA that includes both written and spoken collocations are of particular importance in this regard since in addition to providing all linguistic aspects of a word, they provide us with the frequencies of collocations so that teachers can focus on the most frequent ones and not waste their time on the ones that are rarely used (Fox, 1998). Moreover, such corpora make an opportunity for students to see how collocations are used in many different contexts (religious, political, scientific, etc.), which ultimately assist them in having a remarkable grasp of these recurrent combinations of words and achieve native-like competence.

Recently, a few corpus-based studies that directly or indirectly adopted corpus-based activities were carried out to evaluate the usefulness of corpus-based collocation instruction in comparison to traditional methods of teaching collocations that focus primarily on teaching collocations in isolation from the context. Özbay (2016) who compared the perception of Turkish learners of English for collocations found that the participants were able to determine the meaning of collocations upon reading them used in different contexts. This study concluded that corpus-based explicit instruction utilizing a monolingual corpus proved to be helpful in

increasing students' reading performance. Similarly, there are a few studies that compared the concordancing approach to the traditional approach in collocation instruction (e.g., Jafarpour & Koosha, 2006; Mounya, 2010). All of these studies reached the same conclusion emphasizing the crucial role of concordancing as an inductive approach in L2 collocation learning.

After a thorough literature review, none of the extant literature has investigated the usefulness of integrating Arabic-English parallel corpora in teaching semantic prosody or developing collocational competence in a classroom setting. Even though there are a few projects that have been designed to compile Arabic-English parallel corpora, these corpora are narrowly limited in their size and not freely accessible (Hassan & Atwell, 2016; Al-Ajmi 2004). The lack of studies is attributed to the lack of bilingual parallel corpora in the Arab world (Alotaibi 2017). Therefore, there is a need for more studies that particularly focus on the use of parallel corpora in translation pedagogy. The present study is intended to contribute to this area with a particular focus on EFL Arabic L1 student translators. A freely-accessible bidirectional parallel corpus (Reverso Context) that uses millions of naturally occurring data and covers a wide range of registers (religious, political, social, etc.) will be used as a resource in the training sessions.

CHAPTER 3: METHODOLOGY

3.1 Pilot study

In preparation for the main study, a pilot study with five intermediate level ELI students who are native speakers of Arabic was conducted to see how the research techniques would work in practice. The participants who took part in the pilot study are Saudi students currently studying English for academic purposes at different English language institutes in the United States. The goal of the pilot study in the current research was (i) to see if the participants can do all three corpus-based tasks within the time limit (one hour for each task), (ii) to check the clarity of the instructions at the beginning of each task, (iii) to determine whether a three-session intervention would be sufficient for the participants to learn and implement the new digital resource (Reverso Context) easily to do all corpus-based tasks effectively, and (iv) to identify ambiguous or unclear sentences either in the corpus-based tasks or in the interview.

The pilot study, which was the first step in this research, was found to be helpful in testing the feasibility of the study protocol. A few issues were observed during the pilot study. First, since some of the pilot participants asked whether they could use different ID numbers in each task, clear written instructions were added next to the ID number textbox requiring the subjects to use the same ID number in each task for the pre and posttest. Second, in the background questionnaire, the pilot participants were not able to distinguish between the degrees of familiarity with programming languages (slightly familiar, moderately familiar, very familiar, etc.), so each one of these options was defined in parentheses to make it clear what we mean by these terms. Third, instead of remaining the participants of the remaining time, which was found

to be disruptive for them, a countdown timer was added and once the time is over the survey is submitted automatically. Fourth, even though the participants were instructed in the consent form to use the dictionary only in the pretest, one of them asked if it is possible to use another resource. Therefore, using bold text at the beginning of each task, the main participants were reminded of the resources they were allowed to use. No further issues were found in the pilot study, so once these issues were amended, the study was conducted with the main participants as shown in the next section.

3.2 Context of the main study

3.2.1 Participants

Twenty two Saudi native speakers of Arabic participated in this study on a voluntary basis. The subjects who were recruited in this study were undergraduate students in the department of English at Albaha University, college of arts and sciences, Kingdom of Saudi Arabia. All of them were enrolled in “translation 2” course as part of the requirements for a BA degree in English at Albaha University. Upon approval from the Institutional Review Board (IRB) of the material and study procedures (protocol 2021-0070), permission was obtained from the College of Arts and Sciences at Albaha University to conduct the study in their educational institution.

The participants were asked to report their age, grade in “translation 1”, their overall GPA, and whether they had experience with programming languages, which were expected to have an effect on their performance in the posttest. The background questionnaire showed that all of the participants had “C” or better in “translation 1” with the average grade being “B”. The age

of the participants ranges from 20-33 years with the average age being 22. The overall GPA of the participants vary greatly ranging from 1.31 to 3.66 out of 4 with an average of 2.71. Most of the participants indicated that they had no experience with programming languages. Only two of them seem to have some familiarity with programming languages; one student stated that he was slightly familiar with programming languages, while the other one indicated that he was moderately familiar with programming languages (see Appendix 1 for more details).

3.2.2 Research setting

Due to the COVID-19 pandemic, the study was virtually conducted in the department of English at Albaha University, Kingdom of Saudi Arabia. The department offers three mandatory translation courses (Translation 1, Translation 2, and Translation 3) as part of the requirements for obtaining a BA degree in English. The students in “translation 2” only took part in this study since it was the only translation class that was available when data collection started (Spring 2021). “Translation 2” is taught in the third year, and students are required to have at least a passing grade (D or higher) in “Translation 1” to be able to enroll in “Translation 2”. The study followed a mixed method design, which was based on a one-group pretest-posttest design. The post-test was followed by a structured and semi-structured interview with both the students and the course instructor (see Appendix 2 for the interview questions). The pre - and post-test were conducted virtually, and the participants were given the same load of translation tasks they were used to, and were given the same amount of time they used to take to do in-class translation exercises. In addition, the pre- and post-test tasks were given online during regular class hours.

These strategies were meant to reduce the chances of getting inaccurate results due to change in translation tasks or translation time..

The participants had open access to the internet, and were asked to use their laptops during the study. The participants were monitored during the pretest by asking them to share their desktops during the tests to make sure they are only using the bilingual dictionary that they usually use in such translation tasks. In the posttest, they were instructed to use both the Arabic-English parallel corpus (Reverso Context) in addition to the dictionary. Those who chose not to participate in this study were asked to join another virtual meeting platform and were given a different task other than the study task to work on during class time.

3.2.3 Research design

The current study used a mixed method research design in which one group of students (22 students) underwent a pre-experimental assessment, which was followed by a pedagogical treatment over a period of three consecutive classes (see Appendix 3 for the full details of the pedagogical intervention material), and finally the performance of the same group was assessed again after the pedagogical intervention. The posttest was followed by a structured and a semi-structured interview on the challenges that they encountered while doing the three tasks, and how the parallel corpus (Reverso Context) assisted them to overcome any problems they may have had.

3.2.4 Scope of the study

The study focused only on undergraduate Saudi students currently taking the “Translation 2” course as a part of the requirements for a BA in English. The study was confined to students

in one university in the Kingdom of Saudi Arabia (Albaha University). However, we hope that the implications of this study are transferable to and applicable in other similar contexts within the kingdom and beyond. Also, the study was meant to investigate the effectiveness of Reverso Context in addressing only two aspects of word knowledge: semantic prosody and collocational behavior.

3.3 Material

3.3.1 Reverso Context

The parallel corpus used in this study, which is freely available at <https://context.reverso.net/translation/english-arabic/corpus>, is an ongoing parallel corpus containing millions of bilingual texts in many language pairs extracted from multiple sources (e.g., United Nations, movies scripts, governmental documents, etc.) and aligned sentence by sentence with their translations. It covers a wide range of texts that belong to different genres (religious, social, political, etc.). The parallel corpus used in this study is a web-interface offering bilingual search queries, and includes many other searching options such as searching by part of speech of a word, searching for a specific meaning of a word, or even searching for only the definition of a word in the target language. It also offers many suggested translations for a word allowing users to search for contexts that only include specific translations of words preventing undesired translations (see figure 2). In addition, since this corpus is a compilation of the work of multiple translators, it shows the source of the translation example.



Figure (2) A web-interface of Reverso Context

Since current Arabic-English parallel corpora are either small in size or not freely accessible, the parallel corpus used in this study (Reverso Context) is a freely-accessible corpus released in 2013. It was designed to be large in size (currently contains millions of parallel texts and it is continually expanding), balanced (includes different genres such as politics, religion, medicine, etc.), and involves a wide range of text types. It also supports several languages including Arabic, English, Russian, Italian, French, and Spanish.

According to Zemni, Awwad, and Bounaas (2021), one of the intriguing features of this parallel corpus is that unlike other statistical web-based corpora such as Almaany, Reverso Context is a neural-based machine translation (NMT), which makes it suitable for this study, specifically for task 3 (the translation task). One of the key differences between the statistical-based machine translation (SMT) and the NMT is that in the NMT, the machine does not look for direct equivalents in the target language during the translation process, it functions by looking for patterns and contextual clues in the source text using complex learning algorithms (Bowker & Ciro, 2019). Then, the translated text can be further edited by human translators.

Also, in NMT “neural models are used to hypothesize translations, word by word, without relying on a pre-existing framework” compared to SMT in which the translation is built on “predetermined translation candidates” (Alkhouli et al., 2016, p.54).

A very recent study conducted by Zemni, Awwad, and Bounaas (2021) found that due to its reliance on artificial intelligence, the translations produced by Reverso Context are more reliable than Almaany. In this study, the participants (two groups of translation students at two different universities) were asked to translate the same passages using two different corpora (Reverso Context and Almaany). The findings showed that the ones produced with the help of Reverso Context were much more accurate, even with idiomatic expressions and cultural-related concepts that tend to be difficult for online translation tools. Similar results were found by Kol and Schcolnik (2021) who compared students’ comprehension level using Reverso Context and Rewordify found that students who used Reverso Context scored much higher than those who used Rewordify. Therefore, Reverso Context was selected particularly due its reliance on artificial intelligence (IA) and the findings from previous research recommending using Reverso Context over other online translation tools.

3.3.2 Pedagogical intervention

The goal of the pedagogical intervention was to provide the students with a solid theoretical background of semantic prosody and collocational behavior and introduce them to a new resource (Reverso Context) that can help them in this regard. The pedagogical intervention was conducted over five 3-hour sessions. Figure 3 portrays a simplified workflow of the sequence of the pedagogical intervention.

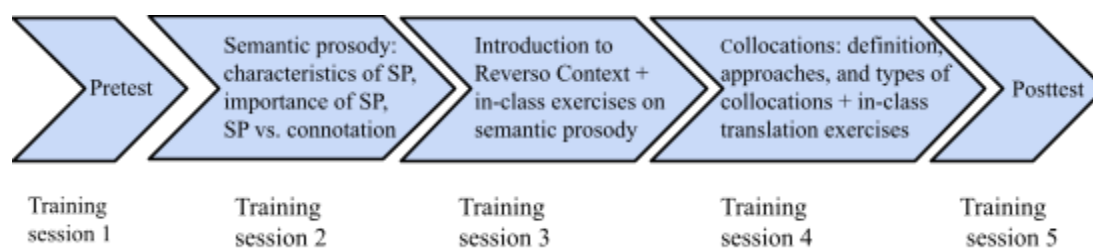


Figure 3: The workflow of the pedagogical intervention

In the first training session, prior to the pretest, the students were asked to voluntarily participate by filling out a consent form written in Arabic (the participants' native language) and in English explaining the goal of the study and the study procedures. They also were asked to fill out a background questionnaire including their overall GPA, their final grades in translation 1, their degree of familiarity with programming languages, etc. Then, they were asked to do three online timed tasks (1 hour per task): multiple-choice task, acceptability judgement task, and a collocation translation task, and they were instructed to use either a monolingual or a bilingual dictionary only. In the second training session, they were introduced to semantic prosody including its definition, characteristics, importance of semantic prosody for ESL\EFL learners, how semantic prosody is different from connotation, and how words with strong semantic prosodies can convey the meaning more effectively than words with neutral semantic prosody. In the third training session, the participants were introduced to a parallel corpus called Reverso Context with an overview of the features of this resource and its potential in semantic prosody identification. At the end of the introduction, they were asked to do two tasks (multiple-choice task and acceptability judgement task) similar to the ones they saw in the pretest. For task 1 (multiple-choice task), they were provided with specific instructions on how to use Reverso Context for semantic prosody identification. The steps that they had to follow were as follows:

1. Make sure that you understand the meanings of all candidate words. Eliminate unrelated words. If you are using Reverso Context, go with the leftmost meaning since it is the most frequent one.
2. Is the context positive or negative? This would help you find a word with an appropriate SP.
3. What is the part of speech/grammatical category of the target word that should fill the blank? This would help you to limit the number of concordance lines or the number of examples that show up on the screen.
4. If the word you are looking for is a verb, you have to find out whether it is transitive or intransitive. If it is a transitive verb (e.g., write, break), look at the right side of it (i.e., its complement). If it is a pronoun, skip the sentence. If it is an intransitive verb (e.g., cry, sneeze, set in), look at the left side of it (i.e., the subject). If it was a pronoun, skip the sentence. If it is an adjunct (adjective or adverb), then look for what it modifies. If it was a pronoun, skip the sentence.
5. Have a blank sheet of paper and create three columns; one called positive, one called neutral, and one called negative as shown below.

Positive	Neutral	Negative
✓		
	✓	
		✓

Table (1) sample of SP classification table

6. Check the examples given in the corpus (50 examples at least) and put a check mark under the appropriate column. Skip incomplete sentences/thoughts. Start with English, and use the Arabic version when necessary. Mark it as neutral if you are not sure.
7. If the verb you are looking for can be transitive and intransitive, then check your original sentence and look for examples with similar transitivity. Once you find a word that is appropriate for the context in hand, then stop working. You found the right word; no need to check the SP for the rest of the candidate words.
8. The final step is to count the number of checks under each column; words with clear positive or negative SP should be clearly positive or negative. If the positive and negative columns have equal number of checks or most of the check marks go in the middle, then this indicates that the word you are looking for has a neutral SP.

For the second task (acceptability judgement task), the participants were asked to evaluate the pragmatic acceptability of several sentences based on their understanding of the semantic prosody of the underlined word in each sentence on a 5-point Likert scale item. As stated earlier, the goal of this task was to see if their understanding of the prosodic behavior of the target words in task 1 would be reflected on their performance in task 2. No instructions were given in this regard, they were just asked to use the traditional resources (monolingual/bilingual dictionaries) and the new resource (Reverso Context) whenever possible.

In the fourth training session, the participants were introduced to a new aspect of word knowledge, collocations and collocational behavior. The introduction included the definition, types, and the different approaches of collocations. It also involved the differences between congruent and noncongruent collocations and the influence of negative transfer in collocation

translation. Then, they were asked to do in-class noncongruent collocation translation exercises.

In the final training session, the participants were asked to do a posttest that was exactly the same as the pretest and they were given the exact time allowed for each task (1 hour per task). It is important to note that all words used in the pre and post-test were not discussed at all during all training sessions.

3.3.3 Corpus-based tasks

The parallel corpus (Reverso Context) was used in this study to investigate the extent to which it can assist students to overcome two main issues that hinder the translation process: (1) the issue of semantic prosody of synonyms and near synonyms in English, and (2) the collocational clashes between English and Arabic, which involves collocating two words that do not usually occur together in the target language.

The first issue that was investigated to see the extent to which a parallel corpus can help with is semantic prosody. In the pretest, which does not include any kind of intervention, the participants were asked to do three tasks: a multiple-choice task, an acceptability judgement task, and a translation task. In the first task, the participants were presented with 12 sentences extracted from COCA; each sentence included a word that has been assigned a specific semantic prosody in previous research. The target words (the words that have been found to have a clear SP, which are *launch, restore, perfectly, fully, mutual, flexible, cause, undergo, utterly, distinctly, symptomatic, and fraught*) were deleted from these sentences and replaced with a blank. The participants were instructed to fill in the blank with the most appropriate word. The four candidate words were as follows: the original word that was deleted from the sentence (the correct answer), the second and the third choices were synonymous words to the original word. These synonymous words were

extracted from Merriam-Webster Dictionary. The fourth word was an unrelated word. Half of the multiple choice items (6 items: 2 verbs, 2 adjectives, and 2 adverbs) should be filled with words that have positive semantic prosodies, while the other half (6 items: 2 verbs, 2 adjectives, and 2 adverbs) should be filled with words that have negative semantic prosodies. In order to ensure that the candidate words that are synonymous to the target word (the word that has been assigned a specific semantic prosody) do not have the same semantic prosody as the target words, I used COCA to check the semantic prosody of all candidate words, and I found that none of the candidate words have similar semantic prosodies to the target words.

Prior to conducting the pilot study, a questionnaire was created using the 12 multiple choice items, and it was distributed to native speakers of English to check the level of agreement among raters in order to check the reliability of the test (inter-rater reliability). An inter-rater reliability measure called Fleiss kappa (Fleiss, 1971) was conducted to determine the probability of agreement between two or more native speaker raters/judges. This measure is specifically designed for determining the level of agreement when raters are selected randomly to make a judgement when the variables being assessed are nominal, which makes it suitable for multiple-choice tasks. There is no one universal threshold at which a researcher can say that there is an acceptable level of agreement among raters/judges. However, Landis and Koch (1977, p.165) suggested interpreting kappa values as follows:

Kappa statistic	Level of agreement
< 0	Poor
0.01 – 0.20	Slight

0.21 – 0.40	Fair
0.41 – 0.60	Moderate
0.61 – 0.80	Substantial
0.81 – 1.00	Almost perfect

Table (2) Fleiss kappa values

Fleiss Kappa was run on the 12 multiple-choice items to determine the level of agreement between native speaker judges (24 native speakers of English). The results showed a substantial level of agreement for 7 out of 12 items ($\kappa=.81$), $p<.01$. Therefore, a new multiple-choice questionnaire was created using another set of 5 words that have similar semantic prosodies to the replaced ones. Fleiss Kappa was conducted again to assess the level of agreement between raters (13 native speakers of English) showing also a substantial level of agreement ($\kappa=.76$), $p<.01$.

In order to investigate whether the participants' responses in the first task (the multiple-choice task) were based on their understanding of the prosodic behavior of the target words, another task (acceptability judgement task) was administered. In this task, the participants were presented with 60 sentences: 48 experimental sentences, and 12 filler sentences. Each one of the target words (*launch, restore, perfectly, fully, mutual, flexible, cause, undergo, utterly, distinctly, symptomatic, and fraught*) were used in four different sentences; two of which included a violation of the semantic prosody of the target words, while the other two sentences had no violation of the semantic prosody of the target words. The sentences that had no violation of the semantic prosody of the target words (24 sentences) were extracted from Corpus of Contemporary American English (COCA), while the sentences that included a violation of the semantic prosody of the target words

(24 sentences) were extracted from COCA, but the context of these sentences had been changed from positive to negative or from negative to positive based on the semantic prosody of the target words. Here is an example showing how the context had been changed.

- His bad performance in the interview is symptomatic of his poor communication skills.
(original sentence)
- His wonderful performance in the interview is symptomatic of his spectacular communication skills. (edited sentence)

The participants then were asked to rate their acceptability judgements of these sentences on a 5-point Likert scale where 1=very acceptable, 2= acceptable, 3= neutral, 4= unacceptable and 5= very unacceptable. The goal of this test was to see if their understanding of the SP of these words in the previous test will be reflected on their acceptability judgements of the contexts in which the target words were used.

Since the context of half of the items (24 items) used in the acceptability judgement task had been modified by the researcher, a questionnaire was created and distributed to native speakers of English to check the internal consistency for all items. The goal of this is to ensure that the items that have similar semantic prosodies would yield similar results across all raters/ judges. In order to measure the inter-item consistency, the questionnaire items were divided into two subgroups for the sake of analysis: a group that included sentences that had no violation of the semantic prosody of the target words, and a group that included sentences that had a violation of the semantic prosody of the target words. The purpose of dividing items into two groups was to check if all items that share similar semantic prosodies would yield similar results. To assess the inter-item consistency,

Cronbach's Alpha (also referred to as coefficient alpha), which is an internal-consistency reliability measure that is widely used for Likert scale data, was conducted on both groups separately showing a high inter-item consistency for both groups, $\alpha = .88$, and $\alpha = .82$ respectively. Because both questionnaires (multiple-choice and acceptability-judgement questionnaire) were distributed simultaneously to native speakers of English, the sentences included in this analysis (28 sentences out of 48), which were the ones in which the 7 words that showed a good level of agreement in task 1 were used. Therefore, another acceptability-judgement questionnaire that included the new five words in which each word was used in 4 sentences was created and distributed to native speakers of English. Again, Cronbach's Alpha was run on both groups separately showing a great level of agreement as determined by Cronbach's alpha. The first group that had no violation of SP showed a Cronbach's alpha of 0.87, and the second one that had a violation of SP also showed a substantial level of agreement with a Cronbach's alpha of 0.83. Also, the alpha level for each item was checked to see what would happen to the overall alpha if an item was deleted, which indicated that all items in both groups should be retained because none of the items would result in an improvement in the overall alpha if it was deleted. In other words, if the Cronbach's alpha value would increase if an item was deleted, then that particular item should be removed/replaced, but none of the items in this questionnaire was found to substantially increase the overall alpha indicating that all items should be retained.

Since Cronbach's alpha can only provide a rough estimate of the internal consistency of all items and how the overall alpha level would be affected if an item was deleted, we used a more conservative method to analyze the level of agreement on each single sentence in the questionnaire. The purpose of using this method was to make sure that all sentences that have a violation of the

semantic prosody would be rated as unacceptable or very unacceptable, and the sentences that have no violation of the semantic prosody would be rated as acceptable or very acceptable. Following Pimentel (2010), we started by converting Likert scale data to equal interval levels of measurement by making a uniform difference between Likert scale points as shown in the table (3) below from Pimentel (2010, p. 111).

Likert Scale	Interval	Difference	Description
1	1.00-1.79	0.79	Very acceptable
2	1.80-2.59	0.79	Acceptable
3	2.60-3.39	0.79	Neutral
4	3.40-4.19	0.79	Unacceptable
5	4.20-5.00	0.80	Very unacceptable

Table (3) Converting Likert scale to equal intervals

According to Pimentel (2010, p.110), converting Likert scale to equal intervals can “be used as a basis for obtaining interval level estimates”. In other words, the ordinal data can be treated as a continuous data by taking the average rating for each sentence; if the average score falls between 1 and 1.79, it would be considered very acceptable, and if it occurs between 1.80 and 2.59 it would be considered acceptable, and so on. Upon checking all of the sentences in the acceptability judgement questionnaire, we found that all items that had no violation occurred between 1 and 2.59 (the range of acceptability), and all sentences that had a violation occurred between 3.40 and 5 ((the range of unacceptability).

The second issue that was investigated in this study is the potentiality of the parallel corpus (Reverso Context) in addressing lexical collocational clashes between languages (Arabic and

English in this case). Following Newmark's (1981) classification of collocations, the three main types of collocations (V-N, Adj-N, and N-N collocations) were included in this study. Since this study is only concerned about non-congruent collocations, only two types of the main lexical collocations were included (V-N, and Adj-N collocations). The third type of collocations (N-N collocations) was excluded because this type of collocations tends to have word-for-word translation and does not require corpus consultation. That is, they can be extracted easily from a parallel corpus. We chose to focus on non-congruent lexical collocations for two reasons: (i) they have been found to be more problematic for non-native speakers than the congruent ones that are learned automatically and effortlessly (Nesselhauf, 2005), and (ii) non-congruent collocations do not have direct equivalents in the target language, which requires the participants to see how different translators rendered the meaning in the target language so that they can choose the most appropriate one that fits the context in hand.

In this test, the participants were given 20 non-congruent collocations used in different contexts in their L1 (Arabic). They were asked to translate the underlined combination of words (non-congruent lexical collocations) only so that they do not have to spend a lot of time attempting to translate unrelated material. Even though translation can be done in either direction (e.g., English-to-Arabic or Arabic-to-English), the focus of this study was on the latter one (Arabic to English). The reason for choosing one direction over the other is that it is more challenging for a translator to translate into the second language (L2) since L2 composition does not come naturally compared to translation into the first language (L1) (Campbell, 1998).

The twenty collocations were selected from a book called "Advanced English Collocations in Use" by O'Dell and McCarthy (2008). The selected collocations were translated into Arabic and

used in different contexts by the researcher who is a native speaker of Arabic. Since the selection of these collocations was based on the researcher's knowledge of Arabic, a survey was created and distributed to graduate students in the US who are native speakers of Arabic to take their agreement on whether the selected collocations are congruent or non-congruent. The survey started with a brief explanation of the two types of collocations (congruent and non-congruent collocations) and an example of each type was provided. The survey takers were not only asked to identify whether the collocations were congruent or non-congruent, but also they were asked to translate the underlined combination of words if they thought that they were congruent. For each collocation, at least 80% of the participants in the survey agreed with the researcher that they are non-congruent. The collocation test was in the productive mode only because previous studies have shown that collocations raise no problems for non-native speakers at the perception level, but at the production level collocations have been found to be a source of frustration for L2 learners regardless of their level of proficiency (Dokchandra, 2019; Laufer & Waldma, 2011; Postolea & Teodora, 2016).

According to O'Dell and McCarthy (2008), the collocations used in their book have been identified as significant in the CANCODE corpus and the Cambridge international corpus. Also, Cambridge Learner Corpus, as O'Dell and McCarthy (2008) indicated, has been used to identify the most problematic collocations made by learners of English. Even though they found hundreds of collocations that have been shown to be difficult for L2 learners, they selected some of them to be included in their book based on the following strict criteria:

1. The most useful collocations in spoken and written English were selected. For example, "*respond to treatment*" that anyone may use is considered more useful than "*grumbling appendix*".

2. The semantically less obvious collocations were used. For example, a combination such as “*a pretty girl*” that everyone can understand is considered more obvious than “*bitter enemies*” that students might translate as “*serious enemies*”.

3.4 Data collection procedures

The study took place over a period of five consecutive classes. In the first meeting, and upon agreement to participate in the study, all of the students were asked to complete a background questionnaire that included some demographic information such as age, native language, etc. Then, they were asked to do a pretest to see the extent to which the traditional resources (monolingual/bilingual dictionaries) that they usually use can help with the identification of the prosodic behavior of near synonyms and the collocation translation task. The pretest was divided into three timed tasks: multiple-choice task, acceptability judgement task, and a translation task. The participants were given 3 hours in total to finish all of the three tasks; one hour for each task. They were allowed to move to the following task once they finish the task they were working on or until one hour passes. In the following class, the students were introduced to the parallel corpus (Reverso Context), and they were provided with an overview of the importance of parallel corpora in translation. The overview was followed by some exercises similar to the ones they had in the pretest, and they were required to use both the bilingual dictionary and the parallel corpus as time allows to familiarize them with the new tool (Reverso Context). In the next meeting, the participants were given more exercises and were instructed to continue using the traditional and the new tool to do these exercises. The exercises contained synonymous words (different from the ones that they saw in the pretest) that differ in their semantic prosodies so that they can consult the parallel corpus to determine their semantic

prosodies. Also, the translation exercises contained verbs that have similar denotational meaning/dictionary definition such as *achieve* and *gain*, but differ in their collocational behavior. In the following meeting, which was the last training session, the students were given more exercises, and they were encouraged to do peer reviews by consulting the parallel corpus to make sure that the new tool (Context Reverso) was completely integrated in their translation activities, and the participants became comfortable with it. In the last meeting, the students were asked to do a posttest that was exactly the same as the pretest.

Since this is an exploratory study, it is of paramount importance to gather information from multiple sources to get a better understanding of the issues and the circumstances surrounding it that cannot be obtained through quantitative approaches. Therefore, the corpus-based tasks were followed by a 5-10 minute interview with 10 of the participants about the difficulties they may have had encountered and the extent to which the parallel corpus was useful in overcoming these difficulties.

3.5 Data analysis

The data collected from task 1 (multiple-choice task) and task 2 (acceptability-judgement task) in the pretest would help determine whether the traditional dictionaries that have a very limited number of examples can help students to observe the difference in semantic prosody and collocational behavior between near synonyms in English. The data collected from task 3 (translation task) would assist us to determine the extent to which dictionaries can assist in translating non-congruent collocations that do not have direct equivalents in both languages.

After the pedagogical treatment was administered, students' responses were assessed again using a posttest, which was exactly the same as the pretest. The scores of the participants in the pretest (before treatment) were compared to the scores of the same participants in the posttest (after treatment) using a paired t-test to determine the potentiality of parallel corpora in a classroom setting. The disadvantage of the one-group pretest-posttest design is that there is no control group to compare to, which might affect the internal validity of the results. However, to control for the confounding variables due to the lack of a control group, the participants were asked to report their major, age, number of times taking the same class, overall GPA, and their grades in translation 1, which is a prerequisite for translation 2. Such information was taken into consideration when interpreting the results to better understand what factors might have been associated with the change in their performance, if there is one. In other words, the purpose of collecting the additional data was to determine whether there were other variables that could explain the posttest scores if they were significantly different from the pretest scores.

Regarding the qualitative data (individual interviews), there is no systematic methodology that all researchers follow for analysing structured and semi-structured interviews, but there are some possible ways that have been suggested for interview analysis. According to Turner (2010), analyzing interviews should start with transcribing all recorded interviews for further analysis of the content. Then, a researcher should find the common concepts between interviewees. If there are different concepts, a researcher should find the reason behind that. Eventually, finding these shared concepts should help a researcher to develop that into themes and then explain/develop his own theory as to why these common themes have been found.

The analysis of the interview data went through several steps. First of all, the interviews were done online using Microsoft Teams and the participants were informed that their interviews were being audio recorded. All audio taped interviews were manually transcribed without irrelevant fillers such as “uh” and “uhm” to make them more readable. After that, they were saved as a word document and translated into English so that the other committee members who are native speakers of English can read them. Then, the interview data were analyzed using MAXQDA, which is a qualitative data analysis software that does not require any kind of coding allowing researchers to do line-by-line coding with a wide range of functions to facilitate the coding process. The coding was done inductively by examining the data and not based on previous hypotheses to prove or disprove. Once all interviews were coded, a comparative analysis was done to observe the recurrent codes and subcodes to identify the themes emerging from the interviews. Finally, all themes were exported in an excel file along with their coded segments for ease of reference. Section 4.4 summarizes the interview data in more detail.

CHAPTER 4: RESULTS

The aim of this study was to investigate the potential of Reverso Context (a parallel corpus that includes millions of texts aligned sentence by sentence in which one sentence is a translation of the other) in identifying two aspects of word knowledge: semantic prosody and collocational behavior. To achieve this goal, a single group of 22 Arabic-English undergraduate students majoring in English were asked to do three tasks (multiple-choice task, acceptability-judgement task, and a translation task) before a pedagogical treatment. The same tasks were administered again, and the participants' responses before the pedagogical treatment were compared to their responses after the pedagogical treatment. The three tasks were coupled with one-on-one interviews to obtain in-depth information pertaining to students' responses and experiences with Reverso Context. The results were as follows:

4.1 Task 1: Multiple-choice task

In this task, the participants' responses were graded based on whether they were able to develop lexical appropriateness strategy enabling them to determine the most appropriate item that could fill the blank. A paired-samples t-test was conducted to compare students' performance before and after the pedagogical intervention. Prior to conducting the analysis, the normality assumption of the difference between the two groups was assessed using the Shapiro-Wilk test indicating that the paired difference was not deviant from normal distribution, $W = 0.97, p = .76$. The results of the paired t-test showed a significant improvement in the students' performance before ($M = 3, SD = 1.41$) to after the pedagogical treatment, ($M = 4.45, SD = 2.40$), $t(21) = 2.47, p < .05, d = .52$, indicating that the new tool (Reverso Context) has

improved students' ability in identifying the SP of near synonyms and selecting the more appropriate word among the candidate words. The results are summarized in table (4) below.

			Paired Differences					t	df	Sig.
	Mean	SD	Mean	SD	Std. Error Mean	95% Confidence interval of the Difference				
						Lower	Upper			
Before	3	1.41	1.45	2.76	0.59	2.68	0.23	2.48	21	.02
After	4.45	2.4								

Table (4) paired sample t-test results for Task 1

4.2 Task 2: Acceptability-judgement task

Since data in this task are not continuous (Likert scale data), a composite score was created by recoding the 5-point Likert scale items to create a total score for each participant. As shown in table (5), the recoding for sentences (1-24) that have no violation of SP was reversed for the sentences (25-48) since they include a violation of SP.

Sentences	very acceptable	acceptable	neutral	unacceptable	very unacceptable
1-24 No violation of SP	4	3	2	1	0
25-48 Violation of SP	0	1	2	3	4

Table (5) recoding of Likert scale items

Upon creating a composite score for each participant, the average score of the students' responses in the pretest was compared to their average score in the posttest using a paired-samples t-test to determine whether the pedagogical intervention improved their

acceptability judgements. As shown in table (6), the results of the paired t-test did not show any statistical difference before and after the treatment, $p > .5$.

			Paired Differences				t	df	Sig.	
			Mean	SD	Std. Error Mean	95% Confidence interval of the Difference				
	Mean	SD				Lower				Upper
Before	97	13	4.95	29.95	6.70	9.06	18.96	.74	19	.47
After	102	27								

Table (6) paired sample t-test results for Task 2

4.3 Task 3: Translation task

In this task, the grading process of the participants' responses went through two stages. In the first stage, since there are several possible translations for the non-congruent collocations, a native speaker's intuition was needed as to which translation(s) would be considered a valid replacement of the original combination of words. Therefore, a questionnaire was created and distributed to 12 native speakers of English to determine which translation produced by the participants can be used exchangeably with the typical translation extracted from the book (*Advanced English Collocations in Use*). At the beginning of the questionnaire, the native speaker judges were given an example of two synonymous collocations used in two different sentences to show them what we mean by synonymous collocations. Then they were asked to read 20 sentences with the collocations being underlined, and they were asked to select all possible replacements (the participants' responses) for these collocations. Since there were slight differences between native speaker judges, only the replacements that 80% of the judges agreed

upon were considered as valid replacements, and the participants' responses were graded accordingly.

In the second stage, a paired t-test was conducted on a sample of 20 subjects to determine whether there is a statistically significant difference between the participants' responses before and after the pedagogical treatment. Before running the paired t-test, the normality assumption was checked using Shapiro-Wilk test indicating that the paired difference was normally distributed, $W = 0.97$, $p\text{-value} = 0.72$. As shown in table (7), the results of the paired t-test showed a significant increase in the participants' mean score after the treatment, ($M = 12.35$, $SD = 3.88$), $t(19) = 3.33$, $p < .01$, $d = 4.77$) than before the treatment ($M = 8.8$, $SD = 3.88$). This indicates that the participants were able to consult the corpus and come up with more accurate translations for the non-congruent collocations.

			Paired Differences				t	df	Sig.	
			Mean	SD	Std. Error Mean	95% Confidence interval of the Difference				
	Mean	SD				Lower				Upper
Before	8.8	3.88	3.55	4.77	1.06	1.31	5.78	3.33	19	.004
After	12.35	2.48								

Table (7) paired sample t-test results for Task 3

4.4 Interview data

The participants were given an opportunity to express their attitudes and thoughts regarding the usefulness of the parallel corpus (Reverso Context). The quantitative data was coupled with a qualitative one (semi-structured interview) as a follow-up strategy to obtain

in-depth information concerning the participants' experiences and views of Reverso Context (see Appendix 4 for some samples of students' interview data). The participants were asked open-ended questions including how they went about using the corpus, the most challenging part among the three tasks, the extent to which the corpus was helpful, etc. In order to obtain a well-rounded view of students' experiences, the participants were asked if they had any comments or suggestions regarding either the effectiveness of the material presented in the pedagogical intervention or the new resource (Reverso Context) to which they had been introduced.

In general, the parallel corpus (Reverso Context) was perceived positively by the participants for several reasons. First, the students did not have to learn a concordancing tool to navigate through the corpus. Reverso Context is a user-friendly web interface, and once the user types a word and chooses the source and target language, the corpus displays hundreds of sentences aligned with their translations with the target word being highlighted in yellow for ease of reference. Second, the students were surprised to know that there is such a freely accessible corpus with a huge number of concordance lines that they can consult in their future work. Third, a lot of the participants felt that they unconsciously learned a lot of information while consulting the corpus. The common collocations between the two languages were learned faster, as indicated by some of the participants, which is actually a form of positive transfer. Fourth, and most importantly, the corpus promoted and offered greater autonomy to students enabling them to amend their mistakes by themselves without recourse to anyone. In fact, more than half of the interviewed subjects indicated that Reverso Context would be their "friend in the future" as it assists them either by confirming or correcting their responses.

When the students were asked about the resources that they used to do the three tasks, all of them reported using a dictionary in the pretest. On the other hand, in the posttest, more than half of the students (6 out of 10) who were interviewed stated that they used a dictionary to obtain the transitivity information when the word being investigated was a verb. This information was not available in the parallel corpus, and the participants did not seem to be able to figure it out on their own by looking at the corpus data. Therefore, they had to use the dictionary as it provides them with straightforward information regarding the transitivity of verbs. The huge number of translations was somewhat overwhelming for one of the participants, so as this subject indicated, he sometimes refers to a bilingual dictionary since a word such as *mutual* had 10 different translations in Arabic, so he used the dictionary since it contains only one meaning, which seems to be the most frequent one.

There were a few differences in terms of how the students used the parallel corpus to do the three tasks. In the first task, there was no difference between them since they were provided with detailed steps on how to use the corpus to identify the SP (see the pedagogical intervention section). Some of them just did not feel the need to follow some steps while others followed all steps as instructed in the pedagogical intervention. As for the second task, all of the participants were not able to use the parallel corpus since this task entails making acceptability judgements based on their understanding of the SP of the target words in the first task. Concerning the third task, which was the most daunting and the most interesting one, the students interviewed had mixed responses regarding how they used the corpus to do the translation task. Most of them, including the course instructor, started with the noun in all of the types of collocations they had (V-N, Adj-N, and Adv-N collocations), and then they looked for the appropriate verb, Adj, or

Adv that can go with it. The main issue that they had with the translation task was brought up by the course instructor, which is the inability to differentiate between semantically similar collocations. Likewise, one of the students had the same problem when he was searching for *dirasatun mutaniay* (a careful consideration), which was a very interesting and a very exhausting one for him. He said,

“I found a lot of equivalents for *dirasatun mutaniay* (a careful consideration) in English, but I cannot tell the difference between them since they all give approximately the same meaning. The most confusing thing in this task is when I find the Arabic collocation translated as one word in English or vice versa. Generally speaking, I was able to some extent to compare between the different collocations and somehow figure out the difference between them, which gives me hope that I can depend on myself in such cases”.

This indicates that the last task might have been a daunting and a tedious one for everyone. Therefore, this issue needs further in-depth elaboration, so we will get back to it with more quotations from students’ interviews when we talk about the pros and cons of the parallel corpus later in this chapter.

In spite of the minor difficulties that the participants had with the parallel corpus data, the interviewees revealed that all of them found the parallel corpus useful enhancing their awareness of SP and collocational behavior crosslinguistically. The only task where the participants did not find it helpful was in task 2 (acceptability judgement task). Even though this task was specifically designed as a follow-up task reflecting student’s understanding of SP in the first task, the results did not show a statistically significant difference between the pre- and post-test.

It may seem counterintuitive, but half of participants interviewed (5 participants) pointed to some reasons that might have led to their poor performance in task 2. **First**, the parallel corpus was not usable in this task; all they needed was to check the SP of the underlined words to see if they are compatible with the context where they were used. **Second**, as some participants indicated, their performance in this task may not reflect their understanding of the SP in task 1. One of the participants said, “even though I know the semantic prosody of some words, I was not able to make a decision in task 2 because there were new words that seem to be key words in some sentences”. Another student expressed his problem with the new words in task 2 by saying, “In addition to being a long task, it has a lot of new vocabulary items. Therefore, I chose number 3 (neutral) for many sentences”. **Third**, in addition to the new vocabulary items that were viewed as one of the main obstacles in making acceptability judgements, four of the participants pointed to a pretty bewildering issue pertaining to making decisions in this task, which is misunderstanding the concept of Likert scale. In other words, these students thought that they were supposed to evaluate the sentences in task 2 based on the degree of negativity. For instance, one of the students expressed his confusion by saying, “it is sometimes difficult to decide because some sentences are more negative than others such as *perfectly invalid* and *symptomatic of his spectacular communication*. These two sentences are not acceptable, but one is worse than the other, so I gave the first one 3 and the second one 5.” This indicates that in addition to his failure to use the scale properly, his judgement was influenced by other items in the questionnaire. **Finally**, the last and the most critical type of problems that the participants reported with Likert scale data is the various strategies employed by the respondents when they could not make a decision; they either refrained from choosing extreme options, chose “neutral”

when they could not decide, used their L1 intuition besides the corpus, or simply left it blank.

The inability to make a decision may have placed a huge load on the respondents, which in turn, may have been a significant contributor to the insignificant difference in students' responses before and after the pedagogical treatment.

At the end of the interview, the interviewees were asked to share their thoughts and opinions regarding the usefulness of using a parallel corpus in a classroom setting and the efficacy of the pedagogical treatment. The participants' comments can be divided into two main categories: their overall experience with the parallel corpus (Reverso Context) including both the positive and negative aspects of it, and their evaluation of the material used in the training sessions. The purpose of this question was to get some general feedback on the problems that the participants may have encountered, to get some recommendations for best practices in the future, and to investigate whether their performance in the three tasks aligns or contradicts with their reported attitudes.

As for their experience with the parallel corpus, all of the participants expressed their sincere gratitude to Reverso Context as a freely-accessible resource that they never thought would exist. They reported that they found it very useful not just for translation purposes or SP identification, but also as a primary resource for English language learning in general. There are many aspects of Reverso Context that the interviewees were happy with. **First**, the design of the corpus itself enabled the participants to navigate easily. Many interviewees noted that highlighting the words they were searching for made it easy for them to skim through the data very quickly without the need to read the whole sentence. **Second**, the large number of translations it contains was another distinguishing feature of Reverso Context. In fact, this

feature had different levels of acceptance; some students were grateful for the multiple translation equivalents, while some other students were frustrated because they had to go over multiple translations and select the most appropriate one. **Third**, the ability to use it for self-correction (autonomous learning), which was one of the most frequent comments reported by almost all participants in one way or another. The responses given to this point specifically highlight their eagerness to use this resource not only for translation purposes, but also as a resource to promote autonomous learning. Here are some quotes from the students' interviews that further substantiate their willingness to use Reverso Context in their future work.

- “Having sentences in both languages side by side motivated me to use it in my future to correct my mistakes without asking someone for help”.
- “The corpus was really helpful, and took me to a deeper level of thinking, and opened many doors of thinking for us”.
- “I think the corpus would be my friend in the future and would solve a lot of problems without resorting to someone for help”.

Fourth, displaying the results in a word-by-word and a sentence-by-sentence level showed the students how some terms function differently in both languages. One of the interviewees noted that comparing authentic texts with their L1 translation equivalents took them to a deeper level of thinking and increased their linguistic awareness to the complexity of their second language. In a similar vein, one of the interviewees mentioned that comparing and contrasting multiple sentences not only assisted him to figure out the correct usage of some terminologies, but also helped him to make connections between the two languages and observe similar and different patterns of language usage. The ability to relate similar patterns in both languages was brought

up by one of the interviewees who said, “I learned a lot of information subconsciously while using the corpus to do task 1 and 3, especially the ones that are similar in both languages”.

Even though the interviewees' reflections on the use of a parallel corpus in a classroom setting was very positive and encouraging, the participants had some critiques of Reverso Context as a potential resource to do the three tasks. A few participants had some issues pertaining to the training process and the pedagogical intervention material presented to them during the training sessions. Some of these concerns seem to be due to the nature of corpora in general, whereas some of them are due to the inadequacy of Reverso Context as a parallel corpus for the three tasks.

The main concern of using Reverso Context that was noted by many students was the incomplete sentences or incomplete thoughts. The interviewees indicated that this issue consumed a lot of time, and some of them said that they would appreciate it if someone had “an edited version of the corpus that does not include incomplete sentences”. The incomplete sentences affected their performance in skimming through data and identifying the SP, and also their ability to find an appropriate translation equivalent in task 3. The incomplete sentences/thoughts, as one of the subjects pointed out, was even worse in task 1 because they were required to read every single sentence to count how many positive and how many are negative sentences and make a decision accordingly. This issue was noted by one of the interviewees, in addition to many others, “In the first task, I followed the steps that we learned, but some words took longer than others based on the type of examples that show up in the corpus; some of them were either incomplete or unclear to me”.

The other issue with corpus data is related to the way texts were translated. The students do not seem to be able to discriminate between semantically similar collocations. This observation was noted by the course instructor who is considered a highly proficient speaker of English. When he was talking about Task 3, he said, “I usually start with the noun and then search for a verb similar to the one in hand, but I find a lot of collocations that might work without any clear distinction between them such as *take a position, take a stand, adopt a stand*”. He continued by saying, “Even when I read the contexts where these collocations were used, I still find them all possible, so I hope there was some kind of explanation that shows the difference between them since it's hard to understand the difference just by looking at the examples retrieved from the corpus”. The semantically similar collocations were a source of frustration for other students, and what complicates the issue is that these similar collocations sometimes have one in translation in the participants’ L1. One of the interviewees said, “Some collocations like *a bitter enemy* have many equivalents in English, but they have one translation in Arabic. I just hoped that every equivalent in English has a different translation in Arabic.”

The third issue with Reverso Context seems to be related to the nature of corpus data in general, which is that the data do not provide students with any explanations. The students themselves are required to consult a corpus, analyze multiple examples, and eventually find patterns that could help them find solutions for their problems. This actually is one of the most important goals for using a corpus. Yet this appears to be a very advanced skill that these students have not mastered yet. One of the interviewed students stated,

“The corpus was used as evidence that my usage was correct but without true understanding of the difference between them. I actually found a lot of semantically

similar collocations that I have never seen but identifying the difference between them was difficult”.

The course instructor also found this to be a very advanced skill for his students as EFL learners. He maintained that the corpus “provides them with evidence-based information”, and “the teacher has to explain and use the corpus as evidence to support his arguments or claims”. One of the students said, “All I know is that this translation, for example, is correct for sure because I found it used that way in the corpus, which I consider to be one of the pitfalls of the corpus”. This supports the course instructor’s expectations that they need some kind of explanation, especially when it comes to similar collocations.

The other part of students’ concerns is associated with the brevity of the training sessions. Half of the interviewed subjects (5 students) indicated that they needed more time to do the tasks and/or more exercises to have a good grasp of the material. Lack of adequate and extensive training was noted explicitly by the course instructor who said, “The training sessions were very brief, so I think you need to work closely with the students to ensure that they are able to use the corpus effectively”. The participants did not state specifically how the insufficient training sessions affected their performance in the posttest; they just wished they had more exercises including transitive and intransitive verbs and more explanation of some new terminologies used during the training sessions such as *complements* and *adjuncts*.

The parallel gathering of both quantitative and qualitative data was meant to enrich our understanding of students’ experiences with the new resource that the students have been introduced to. It was also intended to either verify, explain, or reject results found in the quantitative data. The next chapter integrates the quantitative and the qualitative results to obtain

a more insightful understanding of the issue and better evaluate the students' experiences with the new resource.

CHAPTER 5: DISCUSSION

This study was set out to investigate the potentiality of a web-interface parallel corpus known as Reverso Context in addressing two aspects of word knowledge: semantic prosody and collocational behavior. Given that there was a significant improvement in the students' performance in task 1 (multiple-choice task) and 3 (translation task), this suggests that the incorporation of Reverso Context enhanced students' ability in identifying the prosodic behavior of near synonyms and improved their competence with regard to non-congruent collocation translation. Furthermore, the results of the students' responses indicate that not only corpus linguists but also low-to-intermediate level EFL learners are able to use a parallel corpus in identifying prosodic information and collocational behavior of synonyms.

This chapter will be organized into three categories: the potential of Reverso Context for SP identification, the potential of Reverso Context for translation purposes, and finally some pedagogical implications for language teachers. The results of the three tasks will be discussed thoroughly in the relevant category, and the interview responses will be investigated to see whether they align or contradict with the observed results.

5.1 The potential of Reverso Context for SP identification

Generally speaking, in line with previous studies (e.g., Lee, 2011; Xiao and McEney, 2006; Zhang, 2010), the results of the current study indicate that with the implementation of a data-driven learning approach (DDL), students can inductively identify patterns of lexical items. The "direct-approach" involving directly using corpus data to detect linguistic patterns has been found to be valuable for detecting linguistic patterns (Boulton, 2009; Frankenberg-Garcia, 2014).

Yet some researchers warned that general monolingual corpora have to be used with caution when used with lower level students. Boulton (2009, p.39) maintained that “learners at lower levels might simply not have sufficient analytical and linguistic skills to cope with the complexity and fuzziness of authentic data of a foreign or second language”, so a parallel corpus (Reverso Corpus) was used in this study to help the subjects overcome such potential problems.

As indicated by McGee (2012), the hidden feature of SP made it difficult for non-native speakers to realize how synonyms may have different prosodic behaviors. The interviewed subjects in this study expressed their inability to choose between synonyms in the pre-test. They did not know that words such as *utterly* and *entirely* are semantically similar but pragmatically different, and have different semantic prosodies. This indicates that teaching synonyms without using them in contexts may, in turn, result in negative transfer. In fact, some of the EFL learners in this study stated that they used their L1 intuition to decide between synonyms. Even upon explicit teaching of SP, a few of the participants mentioned that in the post-test they were hesitant to choose the word that was found to be the most appropriate one because of the influence of their L1 intuition.

It is not surprising that some words in Task 1 that happened to be highly frequent such as *cause*, *fully*, and *perfectly* were responded to more accurately than less frequent words such as *fraught*. The participants, as indicated in the interviews, did not spend a lot of time on such words since they are aware of the typical usage of these words. A few of the participants noted that they did not have to check the SP for each single word as they seem to have similar SP to their counterparts in Arabic. This suggests that students might implicitly pick up such differences

between synonyms just by looking at the typical usage of a word, as McGee (2012) indicated. However, an explicit instruction is necessary with less common words.

Teaching SP explicitly becomes more critical when the prosodic behavior of a word does not accord with its counterpart in the speakers' L1 to avoid negative crosslinguistic transfer. The participants were shocked during the pedagogical intervention when they knew that a word such as *provide* has a positive SP. They objected to that by giving examples from their L1; they could not understand why this word is to be used in a positive context even though they were told several times that SP may not be interchangeable cross-linguistically. This suggests that in some cases, there is another factor affecting SP acquisition other than the frequency of a word, which is the degree of compatibility of SP cross-linguistically. That is, if a word has an opposing SP to its counterpart in the speakers' L1, ESL/EFL learners are more prone to errors even with highly frequent words such as *provide*. The third potential reason that may lead to SP errors with highly frequent words could be that "The word's typical semantic prosody appears to be 'really' hidden from user awareness" (McGee, 2012. p. 184). Therefore, the degree of hiddenness could have played a role in such cases. This factor was not taken into consideration when stimuli was created for this study, so more studies are needed to further investigate this.

Even though the participants in this study used a parallel corpus in which English texts are backed up by their L1 translation equivalents, this does not seem to be helpful for some students. Three of the interviewed subjects found the level of language used in the parallel corpus to be very advanced. This indicates that mere juxtaposition of English texts with their L1 translation equivalents may not always increase autonomy and discovery learning. In other words, using concordancing material with reference to students' mother tongue is highly

valuable, but this could have adverse effects if the level of the language was very advanced for the students. It might be difficult to conceive how a parallel corpus such as Reverso Context that contains both languages influenced the students' performance. This is because none of the participants in this study indicated specifically how the level of language affected their performance. It might be that the high level of the language used in the corpus required them to go back and forth between the English and the Arabic version a lot, making it a tedious process for them. This, indeed, requires further investigation.

5.2 The potential of Reverso Context for translation purposes

This study was also intended to explore the effectiveness of Reverso Context for non-congruent collocation translation. The results are in line with previous studies (e.g., Jafarpour and Koosha, 2006; Le, 2010; Li and Dai, 2014; Mounya, 2010) advocating the concordancing approach over the traditional approach in collocation teaching. The significant improvement in the participants' responses in the post-test clearly indicates that EFL learners were able to consult corpus data to evaluate their own responses and confirm or refine their intuitions. Unlike previous studies that considered using a monolingual corpus, this study used a general parallel corpus that offers a large collection of texts aligned with their translations in the participants' L1 so that the students can examine the data in a parallel manner to make valid judgements.

As a parallel corpus, Reverso Context was found to be very valuable for translation purposes. Pearson (2003) including many others stated that a parallel corpus, Reverso Context in this case, allows student translators to see how professional translators convert L1 texts to L2 and

vice versa, how much information was deleted or transferred into the target language, and it also assists students to compare their own translations against already existing translations, and eventually it would assist them to make valid judgements. The aforementioned benefits of parallel corpora cannot be generalizable to all types of parallel corpora and all types of tasks. These benefits will be investigated individually in light of students' test scores and interview responses.

Since most parallel corpora are generally very limited in size (Liu, 2014), they are criticized for providing users with very limited linguistic possibilities. Therefore, such corpora are regarded as less reliable resources compared to monolingual corpora that are usually large in size. This seems partially true even with large parallel corpora such a Reverso Context. This is because “students are too easily persuaded by recurring patterns highlighted in the corpus” (Stewart, 2000, p.85). Even though the variety of students' translations for the same collocations increased shockingly in the post-test, one of the interviewed subjects stated clearly that some of his responses were made based on the frequency of collocations. Even during the pedagogical intervention sessions, when students are given a few minutes to do the exercises on their own before we do them together, they tend to conflate frequency with appropriateness. They did not take advantage of the large collection of texts just to remain safe, which nullifies the goal of using a corpus. In addition, as previous researchers warned, focusing on the most frequent patterns/words/expressions when using a corpus could encourage conventionality in translation, (Hunston, 2002; Stewart, 2000; Tymoczko, 1998). This, intuitively speaking, could be attributed to the level of the participants in this study; researchers and advanced learners might be able to utilize the corpus more effectively than low-to-intermediate level learners.

Despite the importance and effectiveness attached to corpus-based translation teaching, students' grasp of corpus material appears to depend on the quality of corpus data. Almost all interviewed subjects including the course instructor pointed to two issues that hampered the translation process. The first one was the incomplete sentences/thoughts, which consumed a lot of their time. The quality of the corpus data might have been affected because this corpus is a compilation of the work of multiple translators. As shown in figure (4), each sentence has a different type of fragment, and when you hover the cursor over the sentence and click on "see this translation example in its context", a new window will pop up showing one or two sentences before and after the target sentence, but the target sentence would still be incomplete.

for five million dollars and gradually restore it to its wild condition,

٥ ملايين دولار و تعيد تشكيله تدريجيا لوضعه البري،

to spread the funder influence so that we restore the idea

ان نقوي مدى تأثير المتبرعين حتى نستعيد فكرة

Figure (4) Fragmented sentences extracted from Reverso Context

This indicates that the statement that a parallel corpus provides insights into how languages are similar/different, which cannot be gained by using monolingual corpora, might not always be true if the corpus was not carefully edited for classroom use where time and resources are very limited.

The second issue that was found to be problematic for the students during the translation process is the diverse methods opted for by translators while rendering a text from one language to another. In fact, Newmark (1988) pointed to different strategies that translators follow during the translation process. Some translators, as Newmark (1988) mentioned, tend to be very strict

and use a word-for-word strategy following the grammatical rules of the target language. On the other hand, other translators prefer the “free translation” method in which translators reproduce the texts in a way that does not take in consideration the style, form, or even the content of the source language very strictly; it only focuses on conveying the meaning in a comprehensible manner. This causes alignment issues since not every sentence in the source text has a translated version in the target language leading to a mismatch in the extracted concordance lines (Bowker and Pearson, 2002), requiring manual editing of corpus data. As such, these various strategies adopted by various translators might have caused alignment issues affecting the students’ ability in comparing source to target language texts. One of the interviewees expressed his frustration with the translation strategies by saying, “When searching for a good translation for collocations such as *dirasatun mutaniay* (careful consideration), I found a lot of equivalents in English, but I cannot tell the difference between them since they all give approximately the same meaning”.

As stated earlier, one of the main goals of using a parallel corpus in translation was to make it easy for students to read English texts with reference to their L1 Arabic hoping that it would assist them to draw conclusions and make valid judgements. However, looking into a parallel corpus use from a teacher perspective, the students in this study seem to be missing the pedagogic value of the corpus. That is, they are not using it as corpus researchers would. Instead of using it as “thought-provoking”, they are using it as “question-answering, potential” (Bernardini et. al., 2003, p.11). Even though the analysis of the students’ responses in the third task showed a statistically significant improvement in students’ performance, many participants stated clearly that they found a lot of possible answers, but they could not identify the differences between them just by reading corpus data. They had a difficult time understanding semantically

similar collocations such as *poor judgement*, *bad assessment*, and *faulty judgement*. In addition, one of the interviewees pointed to this problem by saying,

“The corpus was used as evidence that my usage was correct but without true understanding of the difference between them. I actually found a lot of semantically similar collocations that I have never seen, but identifying the difference between them was difficult”.

In spite of the clear advantages of parallel corpora over other types of corpora, it is practically challenging for EFL learners to use a parallel-corpus approach to find solutions for non-congruent collocations. This, of course, has some pedagogical implications for language learners, which are going to be discussed thoroughly in the next section.

5.3 Pedagogical implications for language teachers

Despite the fact that semantic prosody has received considerable attention at the monolingual and the cross-linguistic level since the early 1990 indicating that words may have different semantic prosody across languages, no effort was devoted to teaching semantic prosody and collocational behavior to ESL\EFL students using a parallel corpus that is considered appropriate for low-to-intermediate level students. Therefore, this study was designed to investigate the effectiveness of Reverso Context as a general parallel corpus in this regard. The results of the current study has some implications for both semantic prosody teaching and corpus-based collocation teaching.

First, semantic prosody awareness is vital for EFL\ESL learners to have a good command of their L2. Without knowing a word's SP, L2 learners might use a word in a context that is in a

direct contradiction with its SP leading to adding unintended or undesirable meaning. Learning SP not only assists L2 learners to avoid altering the meaning of the source language, but also they might not be able to convey the hidden attributes of the original text when using a word that has a neutral SP. Therefore, instructors have to increase L2 learners' awareness to the significance of learning all aspects of a word, syntactic, semantic, and pragmatic aspects of words to communicate effectively in their L2, as Xiao and McEnery (2006) indicated.

Second, as the results indicate, students seem to commit mistakes due to their ignorance of the prosodic behavior even with highly frequent words such as *provide*. This means that course instructors should consider teaching SP no matter how frequent a word is. This could be because course instructors focus more on the denotational definitions of words, not taking in consideration their SP (Zhang, 2009). Integrating SP in ESL\EFL classrooms using a parallel corpus can help guide their learning of the prosodic behavior of other words on their own due to the inclusion of their L1 as the results of task 1 revealed.

Third, the quality of the parallel corpus appears to be very critical for ESL\EFL learners to identify SP. As the interviews indicated, several interviewees noted in one way or another how the quality of the concordances affected their ability to identify SP. To get the maximum benefit from a parallel corpus, an edited version of the corpus could save a lot of time and effort, especially with less proficient learners. Course instructors can prepare a revised version of the corpus that includes complete sentences with no field-specific jargon.

Fourth, implementing a DDL approach might not be a quick resource that can be incorporated easily in a classroom setting; more problems may arise if students did not receive

sufficient training to improve pedagogical practices of parallel corpora. In this study, the material prepared for the pedagogical intervention included 45 presentation slides involving all aspects of SP such as definition of SP with a lot of examples, characteristics and importance of SP for EFL learners, how SP is different from connotation, how words with strong SP can convey the meaning more effectively, different approaches to collocations, main types of collocations, and finally the participants were given a lot of exercises to work on using Reverso Context that they were introduced to during the training sessions. However, more than half of the participants noted that the training sessions were very brief. They wish they had more exercises on SP and collocational behavior. Again, the brevity of the intervention period and the lack of sufficient training could place a tremendous burden on L2 learners if they had not received adequate training in advance. Similar findings were reported by other researchers emphasizing the importance of training so that students do not get overwhelmed with corpus data (Boulton, 2009; Frankenberg-Garcia, 2014; Yahya, N., Alotaibi, H., & El-Dakhs, D., 2020).

Fifth, recent studies (e.g., Kim and Yoon, 2014; Yang et al., 2019) encourages the use of the participants' L1 in L2 learning as found in parallel corpora for self-correction of their writings. However, low-to-intermediate students, as in this study, do not seem to have the capability to cope with the intensity and intricacy of corpus data due to the difference in the tasks the students were asked to do in these studies. Instead, they just did a quick superficial analysis attempting to find evidence supporting their intuitions. In task 1 in which they were asked to identify the SP of some words, they were somewhat able to skim through corpus data to find out whether a word tends to occur in a positive or negative contexts and make their decisions accordingly. However, in tasks 3 in which they were required to look for an appropriate

equivalent for the non-congruent collocations and rule out the other semantically similar collocations, their responses vary greatly suggesting that such tasks that require deep understanding of semantically similar collocations have to be taught explicitly by instructors to avoid such issues. Then, a parallel corpus may be used to show students how the new words they have been introduced to can be used appropriately in a sentence.

CHAPTER 6: CONCLUSION

6.1 Concluding remarks

The findings of the current study showed that the integration of Reverso Context led to a significant improvement in the students' performance, who are roughly considered to be low-to-intermediate EFL learners. Yet the students' ability to use the parallel corpus successfully seems to hinge upon the level of analysis a task requires. In task 1 in which the students had to skim through the data to get an idea of whether the context is negative or positive, a substantial improvement was observed. Despite the negative effect of incomplete sentences/thoughts affecting SP identification, the interview responses showed that they were able to skip such sentences, which consumed some of their time, and reach a conclusion regarding a word's SP. As Stewart (2010) indicated, many interviewees noted that categorization of sentences to positive and negative was based on their personal judgements, which has been found to be problematic even for corpus linguists, but they eventually were able to make a judgment with high level of accuracy as indicated by the results of task 1.

In task 2, the participants were not able to use the parallel corpus resulting in a similar performance before and after the pedagogical intervention. The second task was used to serve as a follow-up task reflecting the students' understanding of SP in task 1. Contrary to our expectations, the students' showed a different pattern of results in this task. As the interview data indicated, despite their capability to use the parallel corpus effectively in task 1, no significant improvement in the students' achievement was found in task 2. This simply is attributed to several reasons as the students indicated in the interview. The first one was the inability to use the parallel corpus in task 2 as the participants were requested to read 60 sentences in which each

word was used in 4 sentences, two sentences have no violation, and two sentences have a violation of the SP for the target words, and the students were asked to make acceptability judgements on these sentences. The second reason was the time limit for this task, one minute for each sentence, which made it hard for low-to-intermediate level students to make a decision. The third reason was the distinct strategies the students followed when they were not able to make a judgement; some of them either leave the response box blank, refrain from choosing extreme responses, or choose a neutral response. For these reasons, the results of task 3 did not show any significant difference between the students' responses before and after the pedagogical treatment.

In task 3, the evaluation of the students' translations showed a statistically significant difference with the implementation of Reverso Context compared to the traditional method. While the results showed a significant improvement in the students' translations and a wide variation of translations, the interview responses showed otherwise. In other words, the students seem to be unconsciously biased toward the most frequently occurring patterns/words or expressions without knowing the real difference between them, encouraging conventionality in translation. Also, as noted in the interview, using a parallel corpus for non-congruent collocation translation was a bit of a disorienting experience. Unlike corpus linguists who use a corpus to discover invisible patterns, EFL seem to be artificial analysts who use corpus data as a source of evidence that their translations are acceptable. That is, EFL learners use a parallel corpus in situations when they are looking for a proof of the veracity of their translations without deep understanding of the various translations available to them.

6.2 Limitations of the study

Despite the pedagogical value of Reverso Context for SP identification and non-congruent collocation translation, there are some limitations of the current study that have to be acknowledged. Some of these limitations are related to the pedagogical intervention material, while other limitations are related to the parallel corpus used in this study, Reverso Context. Furthermore, there are some potential limitations pertaining to the design of the current research study that should be taken into consideration in future research.

The first and the most apparent issue with this study is the limited number of students who took part in this study (22 in task 1, and 20 in task 2 and 3). Even though we were able to run statistical tests and obtain a significant improvement in the posttest, a larger sample size is highly recommended to accurately assess the appropriateness of Reverso Context for pedagogical purposes. Due to time constraints, it was not possible to include more than one classroom to participate in this study. However, the interview data provided us with in-depth information about the students' experiences and valuable insights into the applicability of a parallel corpus for pedagogical purposes.

As noted by several students, the second limitation of this study is the brief training sessions. Many of the interviewed students wished they had longer training sessions and more exercises including words that belong to different grammatical categories. The training sessions in this study were intended to provide the students with both theoretical background and practical application of the use of a parallel corpus at the end of each training session. The students might have been overwhelmed by the theoretical part including the new terminologies that they were introduced to, followed by the practical aspect of the parallel corpus including the

exercises that they were asked to do right afterwards. Therefore, intuitively speaking, it might be more effective for low-to-intermediate students to begin with the theoretical part and ask them to review the material on their own to make sure that they had a good grasp of it. Then, in the following training session a teacher may start doing some in-class exercises while touching upon some relevant theoretical issues as soon as they get a chance to do so.

The last limitation of the current study stems from the mode of the study (online mode). The study was not intended to be conducted online, but due to the COVID-19 pandemic all classes in the research site switched to virtual learning. There were a few problems encountered because of that. First, some students do not attend the online training sessions on time, which might have affected their ability to understand some of the material presented at the beginning of each training session, which may have affected their overall performance in the post-test. Second, the engagement of the students was less than expected because the training was delivered online. Also, the level of engagement seems to be influenced by information overload as the level of participation was even less when the students were presented with totally new information, which could have affected the learning outcomes. Third, since the three tasks were conducted online, all tasks were timed to prevent the students from taking external help. Yet this technique to increase the validity of the responses put the students under pressure; one of the students indicated that he was stressed because of the countdown timer.

6.3 Future directions

The results of the current study illustrated how the quality of the data in the parallel corpus (Reverso Context) presented the participants with certain obstacles; therefore, to better evaluate the usefulness of a parallel corpus for pedagogical purposes, an edited version would be

more helpful. It is indeed difficult for teachers to prepare their own parallel corpora that do not include incomplete sentences/thoughts and do not contain field-specific jargon. In this case, a parallel corpus such as AEP (Alotaibi, 2017) that was designed specifically for translation training and English language teaching, which can be found at <http://aeparallelcorpus.net/>, should be used. However, it was not used in this study because it is still in its infancy.

While the findings of the present study found a remarkable improvement in the participants' test scores with the new resource (Reverso Context), due to the limited time for the current study only one group of students in one class were included in this study (low-to-intermediate students). To better assess the potential of parallel corpora for classroom usage, future researchers should include both low-level and high-level EFL learners.

The current study used a one-group pre-post test design, and the participants' scores in the pretest were considered the baseline condition to which the post-test scores were compared. One of the drawbacks of this design is that it does not account for confounding variables such as knowledge acquired elsewhere. Yet this is not the case in this study since this was the first time the students were introduced to semantic prosody and collocational behavior, and these topics have not been touched upon in other classes providing evidence that the training sessions using Reverso Context had a positive impact on the students. Nonetheless, further research should consider using a control-group pretest-posttest design in which the experimental group only is subjected to pedagogical treatment while the control group is totally isolated. This way would help us to eliminate most uncontrolled variables (confounding variables) such as knowledge acquired during the study.

REFERENCES

- Aijmer, K. (2008). Translating Discourse Particles: A Case of Complex Translation. In G. Anderman & M. Rogers (eds.). *Incorporating corpora: The linguist and the translator*. New York: Multilingual Matters Ltd.
- Ahmadian, M., Yazdani, H., & Darabi, A. (2011). Assessing English learners' knowledge of semantic prosody through a corpus-driven design of semantic prosody test. *English Language Teaching*, 4(4), 288–298.
- Al-Ajmi, H. (2004). A new English–Arabic parallel text corpus for lexicographic applications. *Lexikos*, 14(1), 326–330.
- Alkhouli, T., Bretschner, G., Peter, J. T., Hethnawi, M., Guta, A., & Ney, H. (2016). Alignment-based neural machine translation. In Proceedings of the First Conference on Machine Translation: Volume 1, Research Papers (pp. 54–65).
- Alotaibi, H. (2017). Arabic-English parallel corpus: A new resource for translation training and language teaching. *Arab World English Journal*, 8(3), 319–337.
- Altenberg, B. & Granger, S. (2001). The grammatical and lexical patterning of MAKE in native and non-native student writing. *Applied Linguistics*, 22(2), 173–195.
- Aston, G. (1997). Enriching the learning environment: Corpora in ELT. In A. Wichmann, et. al. (eds.). *Teaching and Language Corpora*. London/New York: Addison Wesley Longman Inc.
- Aston, G. (1999). Corpus use and learning to translate. *Textus*, 12(2), 289–314.

- Awaj, C. (2018). Examining the collocational knowledge of Libyan Arabic-speaking learners of English in different learning environments: Classroom learning vs. naturalistic learning. *Languages*, 3(2), 1–22.
- Awal, N., Ho-Abdullah, I., & Zainudin, I. (2014). Parallel corpus as a tool in teaching translation: Translating English phrasal verbs into Malay. *Procedia - Social and Behavioral Sciences*, 112, 882–887.
- Baker, M. (1992). *In other words: A coursebook on translation*. London: Routledge
- Baker, M. (1993). Corpus linguistics and translation studies: Implications and applications. In M. Baker, G. Francis, & E. Tognini-Bonelli (Eds.), *Text and technology: In honour of John Sinclair* (pp. 233–250). Amsterdam and Philadelphia: John Benjamins.
- Baker, M. (1995). Corpora in translation studies: An overview and some suggestions for future research. *Target*, 7(2), 223–243.
- Bednarek, M. (2008). Semantic preference and semantic prosody re-examined. *Corpus Linguistics and Linguistic Theory*, 4(2), 113–139.
- Benson, P. (2001). *Teaching and researching autonomy in language*. Applied Linguistics in Series, London: Longman
- Benson, M., Benson, E. & Ilson, R. (2010). *The BBI dictionary of English word combinations* (3rd ed.). Amsterdam: John Benjamins Publishing Co.
- Bernardini, S. (2003). Designing a corpus for translation and language teaching: The CEXI experience. *TESOL Quarterly* 37(3), 528–537.

- Bernardini, S. (2004). Corpus-aided language pedagogy for translation education. In K. Malmkjær (Ed.), *Translation in undergraduate degree programmes* (pp. 97–111). Amsterdam and Philadelphia: John Benjamins Publishing.
- Bernardini, S., & Castagnoli, S. (2008). Corpora for translator education and translation practice. In E. Yuste-Rodrigo (Ed.), *Topics in language resources for translation and localization* (pp. 39–55). Amsterdam and Philadelphia: Benjamins Publishing.
- Boulton, A. (2009). Data-driven learning: Reasonable fears and rational reassurance. *Indian Journal of Applied Linguistics*, 35(1), 81–106.
- Bowker, L. (1998). Using Specialized Monolingual Native-language Corpora as Translation Resource: A Pilot Study. *Meta* 43(4), 631–665.
- Bowker, L. (2000). Towards a methodology for exploiting specialized target language corpora as translation resources. *International Journal of Corpus Linguistics*, 5(1), 17–52.
- Bowker, L., & Pearson, J. (2002) *Working with specialized language: a practical guide to using corpora*. London: Routledge.
- Brown, D. (1974). Advanced vocabulary teaching: The problem of collocation. *RELC Journal*, 5(2), 1–11.
- Bublitz, W. (1996). Semantic prosody and cohesive company: Somewhat predictable. *Leuvense Bijdragen*, 85(1-2), 1–32.
- Campbell, S. (1998). *Translation into the Second Language*. London/New York: Longman.
- Chang, W. & Sun, Y. (2009). Scaffolding and web concordancers as support for language learning. *Computer Assisted Language Learning*, 22(4), 283–30.
- Channell, J. (1981). Applying semantic theory to vocabulary teaching. *ELT Journal*, 2(115–122).

- Channell, J. (2000) Corpus-based analysis of evaluative text. In: Hunston S, Thompson G (eds) *Evaluation in text: Authorial stance and the construction of discourse*. Oxford: Oxford University Press.
- Dam-Jensen, H., & Zethsen, K. K. (2008). Translator awareness of semantic prosodies. *Target*, 20(2), 203–21.
- Dokchandra, D. (2019). Thai EFL learners' collocational competence and their perceptions of collocational difficulty. *Theory and Practice in Language Studies*, 9(7), 776–784.
- Fan, M., & Xunfeng, X. (2002). An evaluation of an online bilingual corpus for the self-learning of legal English. *System*, 30(1), 47–63.
- Farghal, M. & Obiedat, H. (1995). Collocations: A neglected variable in EFL. *International Review of Applied Linguistics in Language Teaching*, 33(4), 315–332.
- Farrokh, P. (2012). Raising awareness of collocation in ESL/EFL classrooms. *Journal of Studies in Education*, 2(3), 55–74.
- Fleiss, J. L. (1971). Measuring nominal scale agreement among many raters. *Psychological bulletin*, 76(5), 378–382.
- Fox, G. (1998). Using corpus data in the classroom. In B. Tomlinson (Ed.). *Materials development in language teaching* (p. 25–43). Cambridge: Cambridge University Press.
- Frankenberg-Garcia, A. (2014). How language learners can benefit from corpora, or not. *Recherches en didactique des langues et des cultures. Les cahiers de l'Acedle*, 11, 1–14.
- Frérot, C. (2016). Corpora and corpus technology for translation purposes in professional and academic environments. Major achievements and new perspectives. *Cadernos de Tradução*, 36(1), 36–61.

- Gablasova, D., Brezina, V., & McEnery, T. (2017). Collocations in corpus-based language learning research: Identifying, comparing, and interpreting the evidence. *Language learning*, 67(S1), 155–179.
- Giampieri, P. (2018). Online parallel and comparable corpora for legal translations. *Altre Modernità*, 20, 237–252.
- Granger, S., & Lefer, M. A. (2016). From general to learners' bilingual dictionaries: Towards a more effective fulfillment of advanced learners' phraseological needs. *International Journal of Lexicography*, 1(10), 1–17.
- Guan, X. (2013). A study on the application of data-driven learning in vocabulary teaching and learning in China's EFL class. *Journal of Language Teaching and Research*, 4(1), 105–112.
- Hassan, S., & Atwell, E. S. (2016). Design and implementing of multilingual Hadith corpus. *International Journal of Recent Research in Social Sciences and Humanities*, 3(2), 100–104.
- Hoey, M. (1991). *Patterns of lexis in text*. Oxford: Oxford University Press.
- Hunston, S. (2002). *Corpora in applied linguistics*. Cambridge: Cambridge University Press.
- Hunston, S. (2007) Semantic prosody revisited. *International Journal of Corpus Linguistics* 12(2), 249–68.
- Jafarpour, A., & Koosha, M. (2006). Data- driven learning and teaching collocation of prepositions: the case study of Iranian EFL adult learners. *Asian EFL Journal*, 8(4), 192–209.
- Ji, Y., We, J. (2000). Research into semantic prosody revisited. *Journal of Xiamen University*, 143, 63–68.

- Johns, T. (1991). Should you be persuaded: Two samples of data-driven learning materials. *English Language Research Journal*, 4, 1–16.
- Kol, S., & Schcolnik, M. (2021). Monolingual and Bilingual Online Dictionary Tools for Academic Reading. *TESL-EJ*, 24(4), 1–15.
- Lee, H-C. (2011). In defense of concordancing: An application of data-driven learning in Taiwan. *Procedia Social and Behavioral Sciences*, 12, 399–408.
- Lee, S. (2011). Semantic prosody in bilingual dictionaries and EFL learners' sentence writings. *English Teaching*, 66(2), 253–272.
- Leedy, P. and Ormrod, J. (2019) *Practical research: Planning and design*. 12th Edition, Merrill/Prentice Hall, Boston.
- Lennon, P. (1996). Getting ‘easy’ verbs wrong at the advanced level. *IRAL: International Review of Applied Linguistics in Language Teaching*, 34(1), 23–36.
- Lewandowska-Tomaszczyk, B. (1996). Cross-linguistic and language specific aspects of semantic prosody. *Language Sciences*, 18(1-2), 153–178.
- Li, H., & Dai, Z. (2014). Effectiveness of self-built Chinese–English corpus on assisting translation teaching. *International Journal of Humanities and Social Science*, 4(7), 96–98.
- Liu, E., & Shaw, P. (2001). Investigating learner vocabulary: A possible approach to looking at EFL/ESL learners' qualitative knowledge of the word¹. *IRAL: International Review of Applied Linguistics in Language Teaching*, 39(3), 171–194.
- Liu, K. (2014). The application of corpora in translation teaching: a critical review. *Translation Quarterly* 74. 36–69.
- Liu, K. (2020). *Corpus-assisted translation teaching: Issues and challenges*. Springer.

- Louw, B. (1993). Irony in the text or insincerity in the writer? The diagnostic potential of semantic prosodies. In M. Baker, G. Francis, & E. Tognini-Bonelli (Eds.), *Text and technology: In honour of John Sinclair* (pp. 157–176). Amsterdam: John Benjamins.
- Louw, B. (2000). Contextual prosodic theory: Bringing semantic prosodies to life. In C. Heffer, H. Sauntson, & G. Fox (Eds.), *Words in context: A tribute to John Sinclair on his retirement* (pp. 48–94). Birmingham, UK: University of Birmingham.
- Louw, B. (2008). Consolidating empirical method in data-assisted stylistics: towards a corpus-attested glossary of literary terms, in S. Zyngier, M. Bortolussi, A. Chesnokova and J. Auracher (eds), *Directions in Empirical Literary Studies*. (pp. 243–264). In Honour of Wille van Peer. Amsterdam: John Benjamins.
- Lu, L. (2005). How a corpus-based approach can contribute to the study of seemingly synonymous words. *Celea Journal*, 28(6), 14–20.
- Mansoori, N., & Jafarpour, M. (2014). Teaching semantic prosody of English verbs through the DDL approach and its effect on learners' vocabulary choice appropriateness in a Persian EFL context. *Advances in Language and Literary Studies*, 5(2), 149–161.
- McGee, I. (2012). Should we teach prosodic awareness? *RELC Journal*, 43(2), 169–186.
- Mounya, A. (2010). Teaching lexical collocations to raise proficiency in foreign language writing. Unpublished master's thesis, Guelma University, Algeria.
- Nesselhauf, N. (2003). The use of collocations by advanced learners of English and some implications for teaching. *Applied Linguistics*, 24(2), 223–242.
- Nesselhauf, N. (2005). *Collocations in a learner corpus*. Amsterdam: John Benjamins.
- Newmark, P. (1981). *Approaches to Translation*. Oxford: Pergamon.

- Newmark, P. (1988). *Approaches to translation*. Hertfordshire: Prentice Hall.
- Nida, E., & Taber, C. (1982). *The theories and practice of translation*. Leiden: E.J. Brill.
- Olohan, M. (2004). *Introducing corpora in translation studies*. London: Routledge.
- Özbay, A. (2016). The potential of corpus-based collocation instruction on the awareness levels of the Turkish EFL students in terms of reading performances. *EPiC Series in Language and Linguistics, 1*, 331–340.
- Partington, A. (1998). *Patterns and Meanings: Using Corpora for English Language Research and Teaching*. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- Partington, A. (2004). Utterly content in each other's company: Semantic prosody and semantic preference. *International Journal of Corpus Linguistics, 9*(1), 131–56.
- Pearson, J. (2003). Using parallel texts in the translator training environment. In F. Zanettin, S. Bernardini, & D. Stewart (Eds.), *Corpora in translator education* (pp. 15–24). Manchester: St. Jerome.
- Pimentel, L. (2010). A note on the usage of Likert Scaling for research data analysis. *USM R&D Journal, 18*(2), 109–112.
- Postolea, S., & Ghivirigă, T. (2016). Using Small Parallel Corpora to Develop Collocation-Centred Activities in Specialized Translation Classes. *Linguaculture, 2016*(2), 53–72.
- Potts, C. (2007). The expressive dimension. *Theoretical Linguistics, 33*, 165–197.
- Rodríguez-Inés, P. (2012). Using corpora for awareness-raising purposes in translation, especially into a foreign language (Spanish–English). *Perspectives, 22*(2), 222–241.

- Rodríguez-Inés, P. (2014). Using corpora for awareness-raising purposes in translation, especially into a foreign language (Spanish–English). *Perspectives*, 22(2), 222–241.
- Salhi, H. (2013). Investigating the complementary polysemy and the Arabic translations of the noun Destruction in EAPCOUNT. *Meta: Translators' Journal*, 58(1), 227–246.
- Sardinha, T. (2000). Semantic prosodies in English and Portuguese: A contrastive study. *Cuadernos de Filología Inglesa*, 9(1), 93–110.
- Schmitt, N. (2000). *Vocabulary in Language Teaching*. Cambridge: Cambridge University Press.
- Sinclair, J. (1991). *Corpus, concordance, and collocation*. Oxford: Oxford University Press.
- Sinclair, J. (1995). Corpus typology: A framework for classification. *Stockholm Studies in English*, 85, 17–33.
- Sinclair, M. (1998) The lexical item. In: Weigand E (ed.) *Contrastive Lexical Semantics* (pp.1–24). Amsterdam: Benjamins.
- Sinclair, M. (2004). *Trust the text: Language, corpus and discourse*. London: Routledge.
- Singer, N. (2016). A proposal for language teaching in translator training programmes using data-driven learning in a task-based approach. *International Journal of English Language & Translation Studies*, 4(2), 155–167.
- Stewart, D. (2000). Conventinality, creativity, and translated text: The implications of electronic corpora in translation. In *intercultural faultlines: Research models in translation studies*. Ed. M. Olohan (pp. 73–91). Manchester: St. Jerome Publishing.
- Stewart, D. (2009). Safeguarding the lexicogrammatical environment: translating semantic prosody, in A. Beeby, P. Rodríguez-Inés and P. Sánchez-Gijón (eds), *Corpus Use and*

- Translating: Corpus Use for Learning to Translate and Learning Corpus Use to Translate* (pp.29–46). Amsterdam: John Benjamins.
- Stewart, D. (2010). *Semantic prosody: A critical evaluation*. New York: Routledge.
- Stubbs, M. (1995). Collocations and semantic profiles: On the cause of trouble with quantitative studies. *Functions of Language*, 2(1), 23–55.
- Stubbs, M. (2001). *Words and phrases: Corpus studies of lexical semantics*. Oxford: Blackwell.
- Teubert, W. (1996). Comparable or Parallel Corpora? *International Journal of Lexicography* 9(3): 238–64.
- Tognini-Bonelli, E. (2001). *Corpus Linguistics at Work*. Amsterdam: John Benjamins.
- Turner, D. (2010). Qualitative interview design: A practical guide for novice investigators. *The qualitative report*, 15(3), 754–760.
- Tymoczko, M. (1998). Computerized corpora and the future of translation studies. *Meta: journal des traducteurs/Meta: Translators' Journal*, 43(4), 652–660.
- Vasiljevic, Z. (2008). Teaching vocabulary to advanced Japanese students: A word association approach. *The East Asian Learner*, 4(1), 1–19.
- Vintar, Š. (2008). Corpora in Translator Training and Practice: a Slovene Perspective. In *Incorporating Corpora: The Linguist and the Translator (Translating Europe)*. Eds. G.M. Anderman and M. Rogers. Clevedon: Multilingual Matters, 153–167.
- Vyatkina, N. (2016). Data-driven learning for beginners: The case of German verb-preposition collocations. *ReCALL*, 28(2), 207–226.
- Wang, L. (2001). Exploring Parallel Concordancing in English and Chinese. *Language Learning & Technology*, 5(3). p. 174–184.

- Wang, Q. (2004). A Corpus-based study of semantic prosodies and bilingual dictionaries. Unpublished master's thesis, Suzhou University, China.
- Wang, Q. (2019). A Corpus-based Contrastive Study on Semantic Prosody of English near Synonyms: A Case Study of Motive and Motivation. *Journal of Arts & Humanities*, 8(1), 01–15.
- Wei, N. (2006). A corpus-based contrastive study of semantic prosody in learner English. *Foreign Language Research*, (5), 50–56.
- Wichmann, A., & Fligelstone, S. (2014). Teaching and language corpora. London: Routledge.
- Wong, T. S., & Lee, J. S. (2016). Corpus-based learning of Cantonese for Mandarin speakers. *ReCALL*, 28(2), 187–206.
- Xiao, Z., & McEnery, A. (2006). Collocation, semantic prosody and near synonymy: A cross-linguistic perspective. *Applied linguistics*, 27(1), 103-199.
- Yahya, N., Alotaibi, H., & El-Dakhs, D. A. (2020). Parallel Corpora in EFL Writing Classrooms: Are They Effective? *International Journal of Computer-Assisted Language Learning and Teaching*, 10(2), 23–39.
- Yoon, H., & Jo, J. (2014). Direct and indirect access to corpora: An exploratory case study comparing students' error correction and learning strategy use in L2 writing. *Language Learning & Technology*, 18(1), 96–117.
- Yoon, S. (2015). Semantic constraint and pragmatic nonconformity for expressives: compatibility condition on slurs, epithets, anti-honorifics, intensifiers, and mitigators. *Language Sciences*, 52, 46–69.

- Zanettin, F. (1998). Bilingual Comparable Corpora and the Training of Translators. *Meta* 43(4), 616–630.
- Zanettin, F. (2001). Swimming in words: Corpora, translation and language learning. In learning with corpora. Ed. G. Aston. Houston, TX: CLUEB, 177–197.
- Zanettin, F., Bernardini, S., & Stewart, D. (2014). Corpora in translator education: An introduction. In *Corpora in Translator Education*. Eds. F. Zanettin, S. Bernardini and D. Stewart. London: Routledge. (pp. 1–13).
- Zemni, B., Awwad, W., & Bounaas, C. (2021). Audiovisual Translation and contextual dictionaries: An exploratory comparative study of Reverso Context and Almaany uses. *The Electronic Journal for English as a Second Language* 24(4), 1–15
- Zethsen, K. (2008). Corpus-based cognitive semantics: Extended units of meaning and their implications for Translation Studies. *Linguistica Antverpiensia New Series*. 7, 249–262.
- Zhang, C. (2010). An overview of corpus-based studies of semantic prosody. *Asian Social Science*, 6(6), 190–194.
- Zhang, W. (2009). Semantic prosody and ESL/EFL vocabulary pedagogy. *TESL Canada Journal*, 26(2), 1–12.

APPENDIX 1

General information of the participants

ID numbers	Age	Grade in translation 1	Overall GPA	Year of college	Familiarity with programming languages
2339	23	A	3.66	5th	Not familiar at all
9679	22	C	2.5	3rd	Not familiar at all
7816	21	B	2.4	3rd	Not familiar at all
7013	20	B	3.59	3rd	Not familiar at all
1131	22	B	3.34	4th	Not familiar at all
4721	20	B	3.5	3rd	Not familiar at all
6205	24	B	1.31	5th	Not familiar at all
5656	21	A	1.5	3rd	Not familiar at all
4900	22	B	3.1	3rd	Not familiar at all
7277	21	B	2.87	3rd	Not familiar at all
8317	22	B	1.99	4th	Moderately familiar
4390	21	B	2.21	3rd	Not familiar at all
1405	21	B	3.16	3rd	Not familiar at all

2864	21	B	2.62	3rd	Not familiar at all
7864	21	A	3.15	3rd	Not familiar at all
2690	24	A	2.77	4th	Not familiar at all
3767	22	B	2.24	3rd	Not familiar at all
2345	21	B	2.21	2nd	Not familiar at all
1240	21	A	NA	3rd	Not familiar at all
1962	33	C	NA	4th	Slightly familiar
1234	21	B	3.44	5th	Not familiar at all
Course instructor	NA	NA	NA	NA	NA


APPENDIX 2


Interview questions

1. What resources did you use to handle the three tasks?
2. What was the most challenging part in the three tasks? Why?
3. How did you use the new resource to do each task?
4. Did the parallel corpus facilitate semantic prosody identification and collocation translation tasks? If yes, how?
5. Was learning to use a parallel corpus easy? If not, why?
6. Do you think that the parallel corpus alone is sufficient to do the three tasks? Why?
7. Do you have any other comments that you would like to add?

APPENDIX 3

The material (presentation slides) used in the pedagogical intervention



UNIVERSITY OF TEXAS  ARLINGTON

Semantic prosody & collocational behavior

Alhassan Alzahrani
alhassanabdulla.alzahrani@mavs.uta.edu
PhD student in linguistics at UTA

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1. Semantic prosody (SP)

- Definition & Examples of SP
- Characteristics of SP
- Importance of SP
- How SP is different from connotation?
- How words w/SP can convey the meaning more effectively?
- Exercises on SP

Definition of semantic prosody

Partington (2004) views semantic prosody as a kind of “evaluative meaning” that is “spread over a unit of language which potentially goes well beyond the single orthographic word and is much less evident to the naked eye” (p. 131). Only by looking at a number of instances of a word, can the semantic prosody be observed.

Examples of words with positive or negative SP

- **Bring about:** improvement, growth, happiness, reforms, etc.
- **Break out:** war, fights, battle, violence, etc.
- **Gain:** confidence, strength, power, advantages, etc.
- **Commit:** assassination, suicide, atrocities, crime, etc.

Characteristics of SP

1. Hiddenness:

- The unavailability of prosodic information in dictionaries (McGee, 2012).
 - Bring about: to be the cause of a situation or action.
- SP is attributed to words that have apparent semantic neutrality (Stewart, 2010).
- SP does not belong to speakers' conscious knowledge of a language (Zhang, 2009).
 - Even NSs cannot determine whether a word has P/N SP.

Characteristics of SP

2. Evaluative or attitudinal meaning/function:

The speaker's or writer's attitude (positive, negative) toward the entity being referred to (Stewart, 2010, p.22).

Importance of SP

1. Dictionaries provide inaccurate information regarding SP (Ji and We, 2000).
2. SP is one of the biggest challenges facing both students and instructors (McGee, 2012)
3. Violation of SP could “blur the meaning or perhaps add an unintended comic or ironic effect” (Zethsen, 2008, p.259)
 - a. The peace broke out. (ironic)
 - b. He couldn’t open the door because I intentionally provided him with wrong code (blurred meaning)
4. Words with strong SP can convey the meaning more effectively in the TL (Stewart, 2010)

How words w/SP can convey the meaning more effectively?

Example (1)

Smith had to undergo an operation.

Smith had to have an operation.

Example (2)

When WWI broke out, even teachers were drafted into the military.

When WWI started, even teachers were drafted into the military.

Semantic prosody vs. connotation

Semantic prosody	Connotation
Not reported in dictionaries - e.g., bring about: cause to take place	Found in the denotational definition of words - e.g., slim: attractively thin
Extended unit of meaning - It carries its SP around with it.	Single unit meaning - Doesn't affect other words (inherent)
Exploited covertly to express the evaluative meaning	Exploited overtly
Too subtle to be perceived by hearer/ reader/ translator	Evident and perceived/translated easily
Can be violated to convey irony - e.g., the peace broke out.	Cannot be violated - e.g., he is attractively skinny.
Register-/genre-dependent	Not affected by register or genre

Introduction to Reverso Context

The screenshot shows the Reverso Context search interface. At the top, there are three input fields: 'Type your word here' containing 'produce', 'Source language' set to 'English', and 'Target language' set to 'Arabic'. A 'Search button' is located to the right. Below the search bar, there are options for 'Noun' and 'Verb'. A list of suggested translations in Arabic is shown, including 'إنتاج', 'صنع', 'إعداد', 'إصدار', 'تقديم', 'ناج', 'إحداث', 'محصول', 'بنج', 'يسفر', 'يحقق', 'أدى', 'يحقق', 'أصدر', 'يؤدي', 'أدى', 'يحقق'. The page also displays example sentences in both English and Arabic with the word 'produce' highlighted.

[Reverso Context parallel corpus](#)

Exercises on SP Multiple-choice task

Choose the most appropriate answer that can fill the gap using both Reverso Context and a dictionary.

1. If you're out of shape and don't play basketball anymore, fatigue will _____ after 9 shots in 25 seconds.
(start - set in - begin - fall)

Exercises on SP

2. I'm glad that they didn't have to _____ a miserable night of cold weather.
(sit through - stay - remain - continue)

Exercises on SP

3. Staying up late every night would _____ suspicion on her father's part.
(stimulate - arouse - excite - awaken)

Exercises on SP

4. These initial requirements sounded intimidating and _____ punitive, and fortunately they were suspended.
(possibly - potentially - hypothetically - expectedly)

Exercises on SP

5. The governor _____ excruciatingly difficult choices this week.
(faced - experienced - met - found)

Exercises on SP

6. Researchers found that approximately 4.7 percent of the nation's population suffers from _____ depression.
(continued, persistent, ongoing, constant)

Exercises on SP

7. This task is _____ difficult, especially if you are not familiar with programming languages.

(fairly, a bit, somewhat, fairly)

Exercises on SP Acceptability-judgement task

Rate the following sentences on a 5-point Likert scale where (1= very acceptable, 2= acceptable, 3= neutral, 4= unacceptable, 5= very unacceptable). The rating should be based on the appropriateness of the underlined words in the given contexts and NOT based on the grammaticality of the overall sentences.

1. Anxiety set in when the man told him it would take several months to get everything.

(1 - 2 - 3 - 4 - 5)

Exercises on SP

2. When life went back to normal, happiness has set in.
(1 - 2 - 3 - 4 - 5)

Exercises on SP

3. Those who try the second exit have to sit through multiple traffic lights.
(1 - 2 - 3 - 4 - 5)

Exercises on SP

4. It is really worth it to sit through ten minutes of the most amazing commercials on the planet.

(1 - 2 - 3 - 4 - 5)

Exercises on SP

5. A narrator who swears she is telling the truth is likely to arouse the reader's suspicion

(1 - 2 - 3 - 4 - 5)

Exercises on SP

6. Travelling outside the country may arouse feelings of pleasure.
(1 - 2 - 3 - 4 - 5)

Exercises on SP

7. Russia foreign policy directly contradicts the evidence and potentially jeopardizes our relationship with them.
(1 - 2 - 3 - 4 - 5)

Exercises on SP

8. The information we obtained are complete and potentially reliable.

(1 - 2 - 3 - 4 - 5)

Exercises on SP

9. The staff faced hostile audience of gang members.

(1 - 2 - 3 - 4 - 5)

Exercises on SP

10. He was faced with an easy decision, so he didn't have to think twice.

(1 - 2 - 3 - 4 - 5)

Exercises on SP

11. - He must be aware of the persistent criticism of his theory.

(1 - 2 - 3 - 4 - 5)

Exercises on SP

12. The persistent praise of his new book made him think of writing another one.

(1 - 2 - 3 - 4 - 5)

Exercises on SP

13. His introduction was somewhat confusing to so many people.

(1 - 2 - 3 - 4 - 5)

Exercises on SP

14. He discussed the problem in a somewhat respectful manner.

(1 - 2 - 3 - 4 - 5)

2. Collocations & Collocational Behavior

- Definition & Examples of collocations
- Approaches to collocations: lexical and grammatical
- Main types of collocations: A-N, N-N, V-N
- Congruent vs. non-congruent
- Source-to-target language translation exercises using Reverso Context

Definition of collocations

Collocations are recurrent combination of words resulted from native speakers' experiences of the expressions, repeated again and again in certain circumstances.

Examples: good chance, high probability, strong likelihood, etc.

Approaches to collocations

1. The quantitative approach
2. The lexical approach
 - a. Arbitrary restrictions on substitutability (e.g., reach a goal)
 - b. Restrictiveness of the sense of the word. If the relationship is semantically motivated, then they are just word combinations (e.g., read a book)

Main types of collocations

1. **V-N collocations**: make a decision, revoke a license, pay attention, catch a bus, etc.
1. **A-N collocations**: a rough estimate, a significant role, a drastic change, a fundamental difference, etc.
1. **N-N collocations**: a nerve cell, board game, defense lawyer, discount rate, speed limit, case study, etc.

Congruent vs. Non-congruent collocations

1. **Congruent collocations**: have a direct equivalent in both languages.
e.g., make a decision, launch a rocket, tell the truth, etc.
2. **Non-congruent collocations**: do not have a direct equivalent in both languages.
e.g., rich imagination, deliver a baby, a heavy smoker,
a large public, a strong tea, heavy rain, etc.

Arabic-to-English translation exercises

Read the following sentences, and translate the collocations highlighted in red ONLY. The first one was done as an example.

١. اتخذ موقفاً محدداً من القضية .
Take a stand

Translation exercise

٢. كان الموقف شديداً وشعرنا ببعض الحرج .

intense situation
serious situation

Translation exercise

يريد أبي أن يقوم بزيارة لأخي محمد . ٣

pay a visit

Translation exercise

هو الذي يتحمل مسؤولية تدهور حالته الصحية . ٤

take responsibility
hold responsibility

Translation exercise

تبذل الحكومة جهوداً حثيثة لحل الأزمة اليمنية . هـ

untiring efforts

substantive efforts

Translation exercise

هناك روبوتات تساعد في عملية توليد الأطفال . ٦

delivering babies

Thank you for listening

Alhassan Alzahrani
alhassanabdulla.alzahrani@mavs.uta.edu

APPENDIX 4

Samples of students' interview data

Student ID	Interview in Arabic	English translation
7013	<p>1. استخدمت الكوربس فقط، وبالنسبة لي كان كافي جداً بل كان أكثر من كاف لأنه يعطيك كل الترجمات الممكنة وأنت تقرر ما الذي يناسبك منها. الجمل الغير مكتملة سببت لي مشكلة فقط أثناء البحث. أحياناً استراتيجيات المترجم مثل استخدام المترجم للترجمة الحرة تجعل الأمر محير أكثر فأحياناً يترجم المترجم ثلاث كلمات في الانجليزية بكلمة واحدة في العربية فالمترجم ركز على المعنى ولم يركز على الحرفية في الترجمة.</p> <p>2. المهمة الثانية هي الأصعب بلا شك، وسبب الصعوبة أولاً: المهمة كانت طويلة جداً (60 جملة)، ثانياً: لم يعد للكوربس فائدة لأنني رأيت الكلمات في التمرين السابق وأعرف الهالة المعنوية لكن أحياناً صعب تحدد هل السياق مناسب أم لا فأحياناً اخترت "محايد" عندما لا أستطيع الحكم. ثالثاً: بعض الكلمات لدي مشكلة من التمرين السابق في تحديد نوع الهالة المعنوية لها لأن أحياناً ال complement يكون بعيد في الجملة وأحياناً لا أجده في الجملة، وأخيراً بعد أن تتضح الهالة المعنوية مثل كلمة mutual التي تبدو إيجابية جداً أفرانها بالعربية وأجدها محايدة فتسبب لي إشكال أيضاً.</p> <p>3. في المهمة الأولى اتبعت الخطوات كما ذكرت لنا في فترة التدريب لكن اضطررت لاستخدام القاموس لمعرفة هل الفعل لازم أم متعد وبقيت الخطوات استخدمت فيها الكوربس. بعض الأفعال لم أحتج البحث فيها لأنها تبدو متشابهة مع ما يقابلها في العربية ولها نفس الهالة المعنوية مثل كلمة cause و symptomatic. بعض الكلمات كانت جديدة علي في المهمة الأولى فأخذت مني وقت أطول لكن الأغلب أعرفها لذلك أذهب إلى الكوربس مباشرة وأبدأ</p>	<p>1. I used the corpus only, and it was more than enough for me since it gives all possible translations, and I can decide which one to choose. The incomplete sentences caused some problems for me while I was searching for a possible translation. Sometimes, the translators use different translation strategies such as “free translation” in which a translator may translate a string of words with one word in English taking into consideration the meaning and not the actual words.</p> <p>2. Definitely, the second task was the most difficult one for some reasons. First, the task itself was long (60 sentences). Second, the corpus was not useful in this task. Even though I saw the words in task 1 and I knew their SP, it was difficult to make a judgement on the sentences (positive or negative), so I chose neutral when I could not decide. Third, in some cases, I had a problem with deciding the SP for a word in task 1 since the complement is not right after it, and sometimes it does not exist at all. Finally, some words like <i>mutual</i> that seem to have a positive SP, are still</p>

<p>بالانجليزي فإذا راح الوقت علي أروح للعربي لأفهم الجملة بشكل أسرع. لو كانت فترة التدريب أطول لكان الموضوع أسهل لنا. في المهمة الثانية لم أستطع استخدام الكوربس فقط أحاول أبحث فيه عن بعض الكلمات الجديدة وأحدد نوع السياق مع أن التحديد لم يكن سهلاً حتى بعد معرفة الكلمات لذلك كانت بعض الإجابات غير متأكد منها لذلك أميل لاختيار محايد أحياناً. المهمة الأخيرة كانت رائعة لأنها توضح لك كيف أن المتلازمات اللفظية غير متشابهة في اللغتين وأستطيع أن اختر الإجابة الصحيحة مع أنني أحياناً أجد أكثر من ترجمة مثل <i>have a conversation</i> و <i>hold a conversation</i> لكن الأمثلة لم توضح لي الفرق بينها وهذا أعطاني أمل في المستقبل أن أصحح أخطائي بنفسى بسهولة في المتلازمات اللفظية لكن ينبغي أن أكون حذراً لما يكون هناك أكثر من ترجمة ممكنة لأن الفرق قد يكون دقيق جداً.</p> <p>4. نعم سهل علي المهمة الأولى والثالثة بشكل كبير جداً لكنه لم يكن مفيد في الثانية إلا لمعرفة الكلمات الجديدة فقط</p> <p>5. ما أعتقد أن هناك أسهل من كذا. مجرد وضع الكلمة وتحديد نوعها واللغة المترجم منها وإليها.</p> <p>6. أتوقع أنه كاف لأداء المهمة الأولى والثالثة لكن الثانية تحتاج أن يكون مستواك عالي في اللغة أصلاً حتى تفهم السياق.</p> <p>7. عندي مجموعة من الملاحظات وهي أولاً: أتمنى لو كان هناك كوربس خاص بالطلاب لأنني مع أنني أعتقد أن لغتي جيدة لكن الكوربس كان صعب وبدون العربي أتوقع شبه مستحيل أن أحل التمرين الأول أو الثالث. ثانياً: الترجمة فتحت لي باب للتأمل فأحياناً أفكر كيف استطاع المترجم أن يعيد صياغة الجملة بطريقة تتواءم مع العربية بشكل رائع. ثالثاً: في المهمة الثالثة أحياناً اختر شيء دون فهمه ، فقط لمجرد وجوده في الكوربس وأعتقد أن هذا من عيوب الكوربس نفسه لأن وظيفته عرض الأمثلة فقط وأيضاً</p>	<p>confusing to me because when I compare it to its counterpart in Arabic, I find it neutral, which complicates the problem.</p> <p>3. In the first task, I followed the steps that we learned during the training sessions, but I had to use the dictionary to check the transitivity of verbs. For some verbs, I did not find it necessary to consult the corpus to find its SP such as <i>cause</i> and <i>symptomatic</i> because they seem to be similar to their counterparts in Arabic. Some words were new to me in this task, so I had to check their meanings first. When I check the SP, I usually start by checking the English version, but if I get stuck or spend a lot of time, I look at the Arabic version to better understand the sentence. I just hoped that the training sessions were longer to better understand how to do the task. In task 2, I could not use the corpus; I just look up new words when I need and then try to see if the context match the SP of the target word, which was not easy even when I know all words in a sentence, so I tend to choose neutral when I am not sure. Task 3 was interesting because it shows us how non-congruent collocations can be translated. I still find it difficult to decide when I find different English collocations such as <i>having a conversation</i> and <i>holding a conversation</i> that have one</p>
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	<p>طبيعة السؤال نفسه فهي لا تتطلب بناء جملة جديدة بل المقارنة بين الترجمات المتاحة واختيار الأكثر مناسبة للسياق. رابعاً: البحث في الكوربس والوصول لإجابة من خلال استعراض أمثلة كثيرة صعب لكن في النهاية يجعلك تحصل على معلومات كثيرة ويزيد مستوى استيعابك للغة وتعقيداتها.</p>	<p>translation in Arabic; I cannot tell the difference between them. The examples do not help me identify the difference between them. However, I intend to use this corpus in the future so that I can self-correct my mistakes. I just have to be careful though because different collocations that have the same translation might have minor differences.</p> <p>4. Yes, the corpus made it easy for me to do task 1 and 3 but NOT 2; the corpus was usable in task 2 to check the meanings of new words.</p> <p>5. I do not think there is an easier way than typing a word and choosing the source and target language and hitting the search button.</p> <p>6. I think the corpus was enough for task 1 and 3, but the second task requires a high level of proficiency to understand the context.</p> <p>7. I have a few comments. First, I hoped that there was a specialized corpus for students. Even though I consider my English to be good, the corpus was difficult, and it was almost impossible to do task 1 and 3 without the Arabic version. Second, the translation task opened doors for me to see how a translator was able to translate English texts in a way that is compatible with Arabic in a harmonious way. Third, In the third task I sometimes choose a specific</p>
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		<p>translation without understanding the differences between the other translations available. All I know is that this translation, for example, is correct for sure because I found it used that way in the corpus, which I consider to be one of the pitfalls of the corpus since the corpus does not explain; you are the one who should figure out the difference. Fourth, even though it was difficult to consult the corpus to find a solution for your problem, it will be very helpful at the end and makes you better understand the language and its complications.</p>
<p>1131</p>	<p>1. الكوربس فقط لأنه يعطي ترجمات كثيرة واعتمدت بالتحديد في البحث عن الترجمة أقصى اليسار لأنها الأكثر تكراراً بعد التأكد من نوع الكلمة هل هي اسم أو فعل أو ظرف.</p> <p>2. الجزء الأكثر تحدياً هو المهمة الثانية لأنني لا استطيع استخدام الكوربس. مع إنني عارف الهالة المعنوية للكلمة لكن ما استطيع تحديد نوع السياق؛ هل هو سلبي أو إيجابي لسببين: تركيب الجملة أحياناً يكون صعب علي وأحياناً يكون هناك مفردات جديدة فاضطر أبحث عنها قبل التحديد. أيضاً وجدت جمل أكثر سلبية من غيرها مع علمي أنها جميعاً غير مقبولة مثل:</p> <p>a. Perfectly invalid</p> <p>b. Symptomatic of his spectacular communication</p> <p>الجملتين جميعهم غير مقبولة لكن الأولى تبدو لي أسوأ جداً من الثانية لذلك أعطيت الأولى ٣ والثانية ٥.</p> <p>3. بشكل عام الكوربس كان مفيد جداً ولأول مرة أعرف أن هناك ترجمات جاهزة تستطيع من خلالها</p>	<p>1. I used the corpus only. It gives a lot of translations, and I rely on the leftmost one as it is the most frequent one. Then I choose the part of speech I am looking for.</p> <p>2. The most difficult task was task 2 because I could not use the corpus to do this task. Even though I knew the SP for most words, I could not decide whether the context was negative or positive for two reasons: first, the sentence structure is sometimes difficult for me, second, sometimes I find new words that I had to translate before I decide. Even when I know all words, it is sometimes difficult to decide because some sentences are more negative than others such as the following:</p> <p>a. Perfectly invalid</p>

المقارنة واستخراج الترجمة المناسبة للنص الذي بين يدي. في المهمة الأولى اتبعت جميع الخطوات التي أخذناها في فترة التدريب بدءاً بالتعرف على السياق النصي للكلمة وتحديد نوع الكلمة المطلوبة، لكن الذي استنزف وقتي هو الجمل الناقصة مع العلم أن بعضها تنتهي بنقطة لكنها ناقصة، كنا نحتاج تمارين أكثر في المهمة الأولى لتشتمل على جميع أنواع الأفعال المتعدية واللازمة. في المهمة الثانية التي تبدو سهلة لأنني لا أحتاج إلى البحث مجدداً لكني كما قلت تحديد نوع الهالة المعنوية كان صعب بسبب صعوبة مستوى اللغة والمفردات والتي تبدو أعلى من مستوانا. أيضاً أثناء قراءتي للجمل وجدت أن هناك فرقاً بين درجات السلبية مثل *undergo magnificent changes* والتي تبدو أقل سلبية من *cause economic growth* لكن ما أدري هل هذا كان صحيحاً أم لا. مع العلم أن التنتين غير مقبولة لكني أعطيتها درجات مختلفة بناءً على تقييمي لها. المهمة الثالثة كانت الأسهل وزودنا الكوريس بترجمات عديدة لم أكن أتوقعها. أنا أبداً دائماً بالاسم مثل كلمة "عدو" ولم أذهب بعيداً حتى وجدت جملة استخدمت فيها "عدو لدود". فتعلمت أن أبداً بالاسماء دائماً وانظر في العربية بسرعة حتى أجد الفعل أو الصفة التي أبحث عنها.

4. نعم سهل علي كثيراً، وراح استخدمه في المستقبل فلغته تبدو سهلة أحياناً ووجود الترجمة مظلمة ساعدني في الوصول للهدف دون قراءة الترجمة كاملة. أتمنى لو كان نوع الفعل *transitive* أو *intransitive* مضافاً بدل أن أفضي وقت في معرفة نوعه أولاً.

5. تعلم استخدام الكوريس كان سهلاً جداً فهو يقوم بالعمل بنفسه وليس عليك سوى النظر سريعاً في النتائج. الشيء الذي أخذ مني جهد هو عدد الترجمات التي تظهر لي ولو لم تقل لنا أن الترجمة الموجودة في أقصى اليسار هي الترجمة الأكثر تكراراً لكان البحث فيه صعباً نسبياً.

6. أعتقد أنه كافٍ جداً ولا داعي لأي مصدر خارجي لأن الكوريس يقوم بدور القاموس أيضاً بل يفوقه بعدد الترجمات لكن القاموس يعطي معلومات إضافية كنوع

b. Symptomatic of his spectacular communication

These two sentences are not acceptable, but one is worse than the other, so I gave a 3 and b 5.

3. First of all, the corpus was very useful, and this is the first time for me to know that there is a website that has real translations that I can compare to my own translation to come up with the best translation. In the first task, I followed the steps that we learned during the training sessions. I started by identifying the context and that part of speech of the word that should fill the blank, but the incomplete sentences wasted my time. Some of these sentences end with a period even though they are incomplete. I wish we had more exercises in the first task that include all types of verbs (transitive and intransitive). In the second task, which seems to be easier than the first one, what made it even more difficult than the first one is the level of the language and the new vocabulary items that seem to be beyond our level. Also, when I was reading the sentences, I found that they are not at the same level of negativity; some are more negative than others. For example, *undergo magnificent changes* seems to be less negative than *cause economic growth*. Even though both are not acceptable to me, I gave them

<p>الفعل وهل هو متعدي أم لازم وأيضاً الجمل فيه بسيطة نسبياً وكأنها وضعت للمتحدث الغير أصلي للغة</p> <p>7. لدي بعض الأمور التي لا أدري كنت أتمناها سواء أثناء التدريب أو حتى في الكورس نفسه. أولاً: لا أعتقد أن فترة التدريب كانت كافية ولذلك ربما لا تجد فرقاً كبيراً في النتائج مع العلم أن الأمر مفهوم نظرياً لكن يحتاج إلى تدريب مكثف. ثانياً: مستوى اللغة أكبر من الذي اعتدنا عليه في المناهج الحالية وأيضاً تركيب الجمل يبدو أصعب من الجمل الموجودة في القواميس التي تخلو من المصطلحات التقنية. ثالثاً: أتمنى لو نستطيع أن نبحث بطريقة ما عن الجمل العامة التي لا تنتمي لأي مجال؛ أي مستخرجة من اللغة الانجليزية اليومية لنوفر بعض الجهد والوقت في البحث. أما بالنسبة للمتلازمات اللفظية فعلى الرغم من كثرة الترجمات مثلاً لعبارة "سوء تقدير" إلا أنني أجد صعوبة في التفريق بين poor judgment و misjudgment وهناك ترجمات أخرى لا أتذكرها لكن يصعب معرفة الأكثر مناسبة منها فكل واحدة منها تحتاج وقت لمعرفة المعنى الدقيق لها وأي نوع من التقييم ولماذا كلها ترجمت بنفس المعنى في العربية. عموماً على الرغم من الفوائد الكبيرة التي يقدمها إلا أنه يسحب الطالب إلى مستويات أعمق تتطلب جهداً أكبر وتفتح لها فاق لم يكن يفكر فيها.</p>	<p>different ratings based on the degree of acceptability. The third task was the easiest one for me because the corpus provided us with many equivalent translations in English that I did not expect. I started with the noun in all collocations, and then I looked at the Arabic version to see the one that is more appropriate to the one I am looking for.</p> <p>4. Yes, the corpus facilitated the translation task a lot for me, and I intend to use it in the future because the language it contains seems easy sometimes. Also, highlighting the words I am searching for made it easy for me to skim through the data very quickly without the need to read the whole sentence. The only thing that I hope I can find in the corpus is the type of transitivity of the verb (transitive or intransitive) instead of wasting time looking up the transitivity of verbs.</p> <p>5. Learning how to use the corpus was super easy. All I needed was typing a word and hitting the search button. It would have been very difficult to use the corpus if you did not tell us that the most frequent translation is the leftmost one.</p> <p>6. I think the corpus by itself is enough, and no need for any extra resource because the corpus has all the necessary information that a dictionary has. It is even better than</p>
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		<p>the dictionary because of the large number of translated sentences it has. The good thing about the dictionary is that the sentences are short and easy, and the degree of transitivity of verbs are there. I think the dictionary has relatively simple sentences as if it were specifically designed for non-native speakers.</p> <p>7. I have a few things that I would like to share: First, the training sessions were not enough, so you may not find a large difference between the pre and posttest. I theoretically understood the concept of SP, but it was practically difficult. Second, the level of language was way more difficult than the one we are used to, which seems to be more difficult than the ones in the dictionaries we use. Third, I hope I can search for sentences that do not belong to any field. I mean I wish I could look for sentences that were extracted from everyday English to reduce the time spent to read the sentences. Regarding collocations, even though, for example, there are many translations for <i>poor judgement</i>, I still find it difficult to distinguish between this one and other similar collocations like <i>misjudgment</i>. There are other translations that I cannot remember. It is still difficult to identify the difference between them. I would need a lot of time to read a lot of</p>
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		<p>translations trying to see the difference between them accurately because most of them have almost the same translations in Arabic. In general, the corpus was helpful, and took me to a deeper level of thinking, and opened many doors of thinking for us.</p>
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